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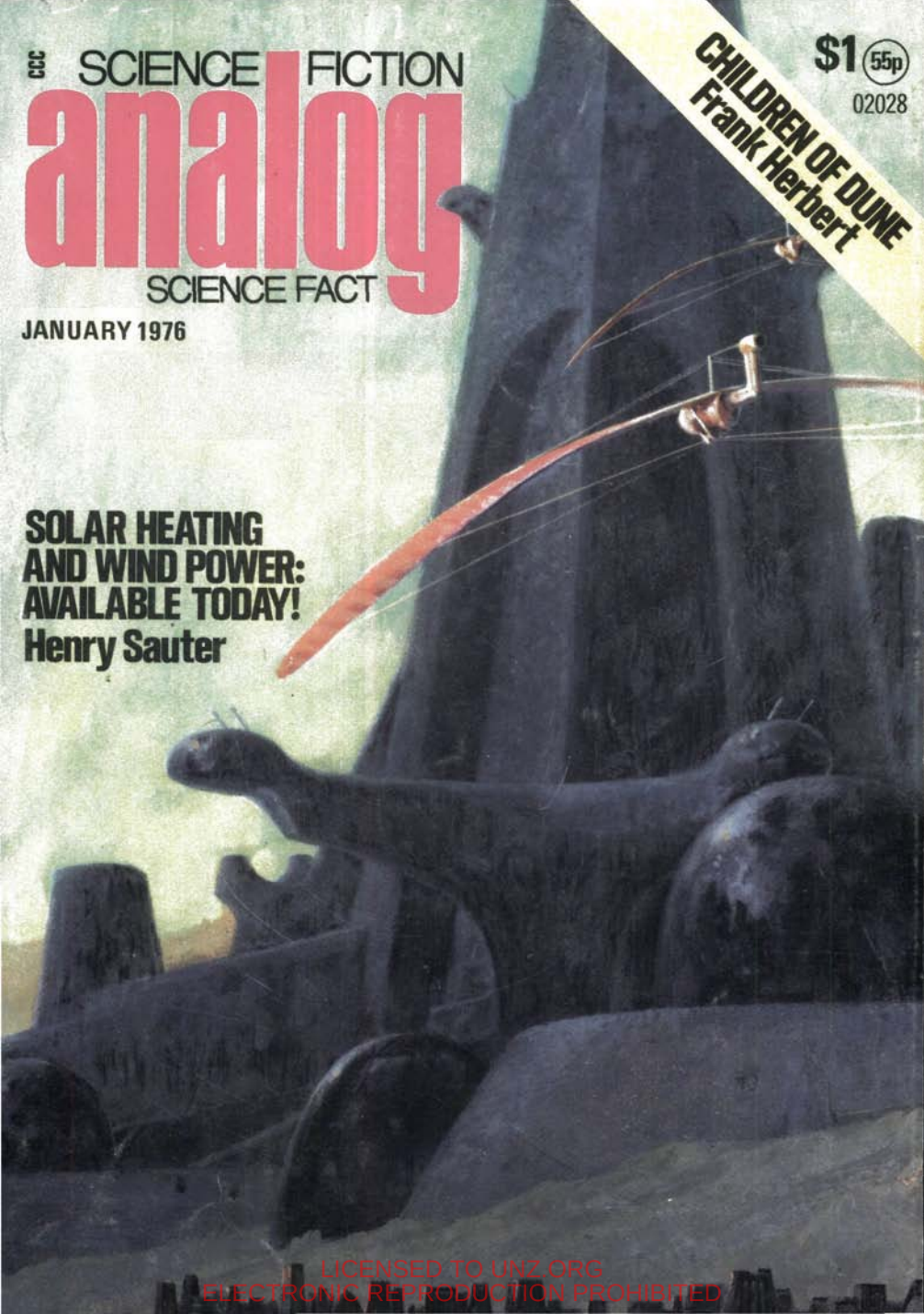

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SERIAL

CHILDREN OF DUNE, Frank Herbert.....12
(Part One of Four Parts)

SHORT STORIES

THE PERFECT COP, H.H. Morris.....117
SEVEN IS A BIRDSONG, C.L. Grant.....124
ANGEL, Herbie Brennan.....136

SCIENCE FACT

SOLAR HEATING AND WIND POWER:
AVAILABLE TODAY! Henry Sauter.....150

SPECIAL FEATURE

SPECIAL AND GENERAL CREATIVITY,
Rich Isaacman.....164

READER'S DEPARTMENTS

THE EDITOR'S PAGE.....5
IN TIMES TO COME.....123
THE ANALYTICAL LABORATORY.....133
THE REFERENCE LIBRARY, Lester del Rey.....168
BRASS TACKS.....174

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teaching the teachers

Everything's up to date in Lawrence, Kansas.

Amidst the pleasant green hills of the University of Kansas' Lawrence campus, they're teaching science fiction to the teachers of science fiction courses. And at the University's Space Technology Center, they could (if asked) teach NASA's public relations people a few things about the real benefits of the space program.

Science fiction first.

As regular Analog readers know, our June 1974 issue featured an Editorial which took to task those poorly qualified (and, in many cases, totally unqualified) teachers who give science fiction courses at the university and secondary school levels. A stream of letters from unhappy students poured into the Analog office after that Editorial, most of them from students bemoaning the fact that the teachers knew less about SF than the students themselves. Many of the letters came from students who were angry because their teachers openly loathed science fiction and were determined to brainwash the classes into hating it. A few letters came from irate teachers who insisted they were doing the best job they could.

James Gunn, one of the top science fiction writers and a professor of English at the University of Kansas—where he regularly gives a science fiction course—wrote an answering Guest Editorial for our November 1974 issue. He pointed out that science fiction is a "new boy" on campus, and that the teachers are gradually groping toward a satisfactory way of handling the subject.

The next time Jim and I met face to face (in Minneapolis, if memory serves) we braced each other with the idea of producing a course in science fiction *for the teachers*. I remembered back to the mid-Fifties, when I had been writing movie scripts for the Physical Sciences Study Committee—a group of the nation's leading physicists who, fed up with the poor quality of incoming physics freshmen, decided to build a new course in high school physics. They quickly learned that teaching modern physics to the students was easy, if the teacher knew the subject. So each summer the PSSC people set up special seminars to teach the teachers.

Jim had similar ideas, and suggested that the University of Kansas might sponsor a summer Institute on the teaching of science fiction. We further planned to get

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some of the top science fiction writers to come to the Institute for a few days each, to tell the teachers what the field is like from the inside. The money for this would come, we hoped, from donations from the science fiction publishers.

Those were the plans. The results were somewhat less than we had hoped for, though much better than we had feared.

The University of Kansas generously agreed to sponsor the three-week-long Institute. But by the time the necessary University approvals were granted and the arrangements made, it was almost the end of the academic year. Hurried notices were sent out to the academic community, and a tiny blurb was squeezed into the July issue of Analog. Most teachers make their summer plans early. This fact, combined with the sickly state of the economy, kept the attendance at the first Institute down to twelve teachers—almost all of them from the Kansas area.

The publishers failed to support the Institute almost entirely. Condé Nast Publications sponsored my appearance there. Only Prentice-Hall Publishing Corporation, through its Pren-Hall Foundation, contributed the funds for another author's appearance. No other publisher put up a penny. Several authors made their own way to Lawrence, including Gordon R. Dickson, John Brunner, Robert Bloch, and Harlan Ellison.

The local science fiction fans, hearing about all this, arranged a science fiction convention in nearby Kansas City for the weekend of July 18-20. Several of the authors attended, and the Institute's teachers had their minds slightly blown by the sight of a few hundred science fiction fans cavorting. (Kansas City will be the site of the 1976 World SF Convention, by the way. Robert A. Heinlein will be the Guest of Honor.)

In all, the Institute was a success. Despite the small turnout, all those who attended—including the guest authors—learned a good deal about the problems of teaching science fiction and their potential answers. The University was pleased enough with the results to go ahead and sponsor a second Institute, which will run from June 6 through 25. (Applications must be received before April 15; write to James Gunn, English Department, University of Kansas, Lawrence, Kansas 66045.)

If I could find any fault with the Institute, it was that there was too much emphasis on the history of science fiction as a literary genre, and not enough stress on the various fields of human endeavor that *make* science fiction: such as scientific research, sociology, politics, history, technological developments, et cetera. In the coming Institute, perhaps the participants can examine the techniques of team-teaching

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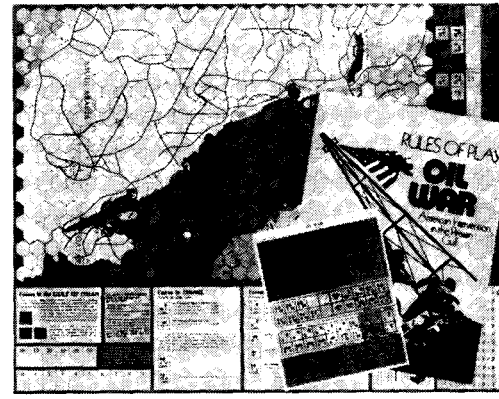

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SF, with contributions from each of these fields as well as from English literature.

Of course, I was particularly interested in how Analog can be used to help teach science fiction. In previous meetings with SF teachers, particularly those associated with the Science Fiction Research Associates, I had gotten the impression that those who teach "the literature of the future" insist on doing so out of thirty-year-old books. The teachers prefer the old standbys because they know what's in them, and a body of critical appraisal tells them what they should say to their classes about the books. Analog, being new and different each month, would force the teachers to read, think and decide for themselves. A fate many teachers are reluctant to embrace.

The teachers at the Institute were enthusiastic about Analog, however. They suggested that they could use the magazine if they had enough copies of one issue to distribute to each student in the class. Then that one issue of the magazine could serve as one of the "texts" for the course.

Analog would be glad to cooperate in this kind of experiment. Any teacher who wants a package of one issue of the magazine should write directly to me, and we will try to get the right number of magazines to the classroom, at our special rate for educational institutions.

(Special note: James Gunn's handsome history of science fiction, *Alternate Worlds,* has just been published by Prentice-Hall. It is lavishly illustrated, and if you can't afford the $29.95 price, at least urge your local library to get a copy.)

Meanwhile, across the road from the University's main campus is the beautiful, modern and efficiently designed headquarters of the Space Technology Center. Very quietly, without much fuss, the students and professional staff there are passing on the benefits of the space program to the farmers, ranchers, mayors and taxpayers of Kansas.

A century ago, cattle ranchers hired riders—the John Wayne kind of cowhand—to guard their herds, to inspect the open range and check on the encroachment of woodlands and scrub growth that cut down on the available area of grassland, to check on the quantity of water available, and its quality. Today, a single photograph from an Earth Resources Technology Satellite (ERTS) can give that kind of information for the entire state. And more.

Farmers need early warning of crop diseases. Urban planners need to know how many new houses are actually being built in the suburbs. City councils need to know just where the pollution in their rivers comes from. Taxpayers need to know why they're being asked to

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spend billions each year on the space program.

NASA's public relations experts have always centered their hoopla on the manned space programs, partly because they're the most expensive items on the budget and partly because it seemed easier to glamorize the astronauts than an inert chunk of metal and electronics.

But maybe NASA's supersalesmen should be glamorizing the men and women who work in places like the University of Kansas' Space Technology Institute. These are the highly-skilled (and often lowly-paid) people who take those satellite photos and readout tapes and translate them into *information* that lowers costs for farmers, ranchers, supermarket customers, and taxpayers.

Make no mistake about it. Manned spaceflight is vital, as almost every reader of this magazine must know. The money spent on manned spaceflights is largely an investment in future technological capabilities. The point is, the investments we've already made are now paying dividends. Relatively unheralded satellites such as ERTS are paying off *now*. NASA should be highlighting this, especially when there are no "glamor" manned flights in view for five years, and the tax bills for the Space Shuttle are becoming very vulnerable to shortsighted Congressional cutpurses.

The Shuttle is not merely NASA's hope for the future. It is our hope, too: every one of us. Once the Shuttle begins to operate, the cost of placing payloads in space will go down dramatically, and the benefits everyone receives from space hardware will go up just as dramatically. It would be a wise strategy to show the American taxpayers what we are already getting from space. Not what's going to happen ten years from now, but what's happening today. NASA has a strong and effective answer to the taxpayer's impatient, "But what's in it for me?"

The main thrust of the space program development from now to the end of the century will have to be the goal of reducing the costs of placing payloads in orbit. We have the hardware, right now, to do anything from checking the level of the water table across Kansas to checking the atmospheric constituents of the outer planets. The big problem, the big expense, is boosting the hardware into space. The Shuttle is the first step toward a better, cheaper, more flexible space transportation system.

But NASA will never get to build those next steps, or the Shuttle itself, if the taxpayers feel that space hardware doesn't benefit them directly. Since the hardware *does* benefit them, isn't it time NASA started telling everybody about it?

THE EDITOR

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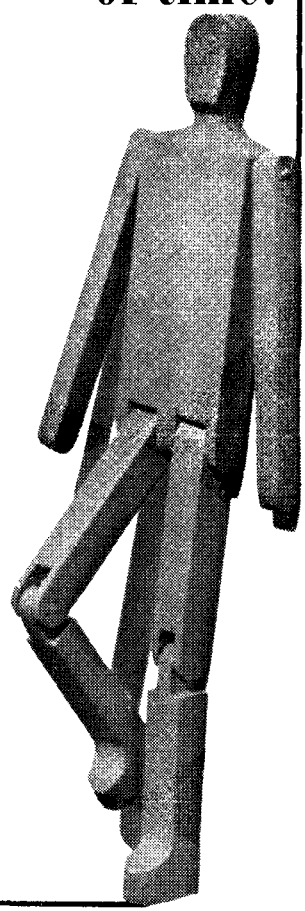

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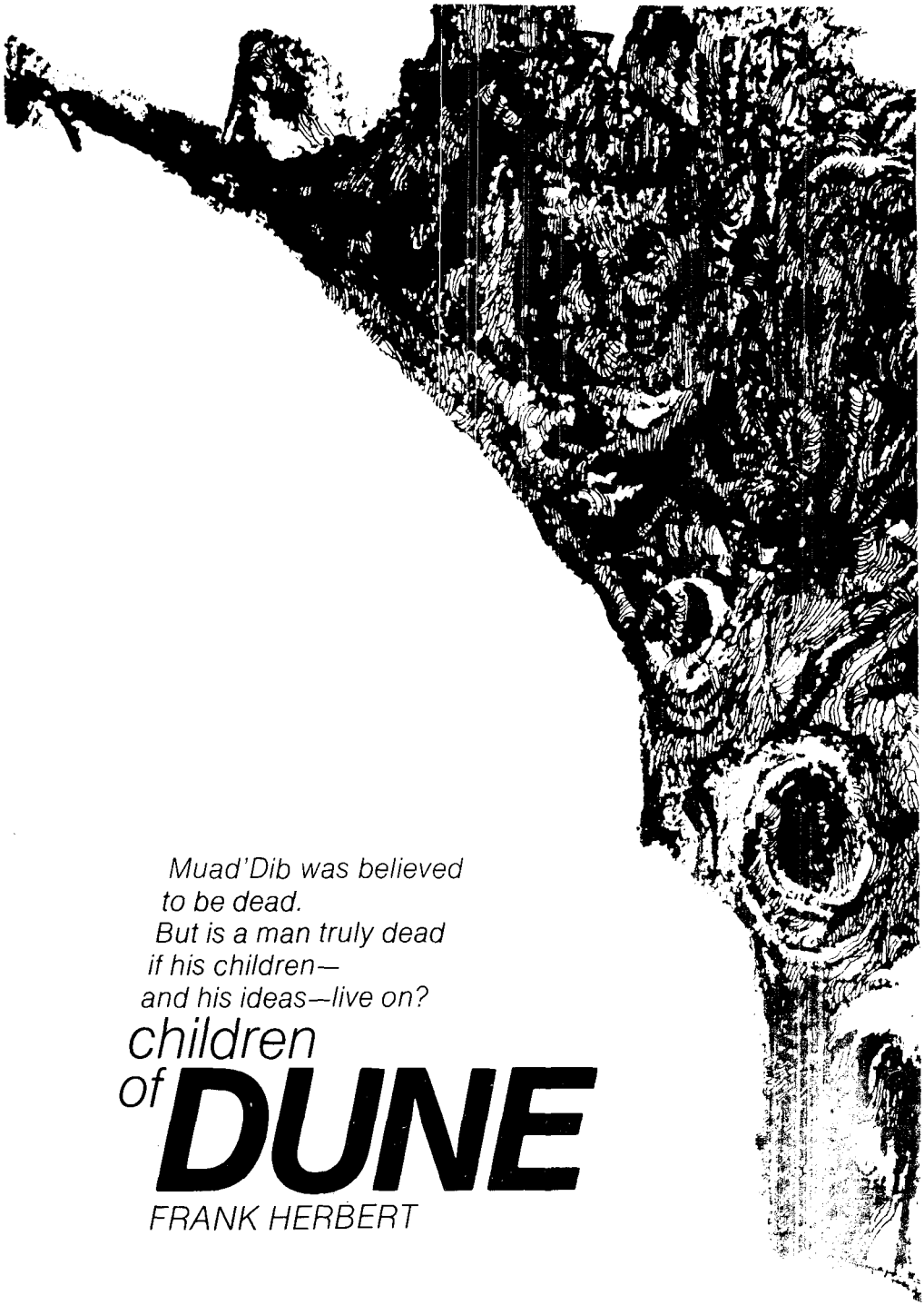

Muad'Dib was believed to be dead.
But is a man truly dead if his children—and his ideas—live on?

children of DUNE

FRANK HERBERT

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JOHN SCHOENHERR

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Muad'Dib's teachings have become the playground of scholastics, of the superstitious and the corrupt. He taught a balanced way of life, a philosophy with which a human can meet problems arising from an ever-changing universe. He said humankind is still evolving, a process which will never end. He said this evolution moves on changing principles which are known only to eternity. How can corrupted reasoning play with such an essence?

—Words of the Mentat
Duncan Idaho

A spot of light appeared on the deep red rug which covered the raw rock of the cave floor. The light glowed without apparent source, having its existence only on the red fabric surface woven of spice fiber. A questing circle about two centimeters in diameter, it moved erratically—now elongated, now an oval. Encountering the deep green side of a bed, it leaped upward, folded itself across the bed's surface.

Beneath the green covering lay a child with rusty hair, face still round with baby fat, a generous mouth—a figure lacking the lean sparseness of Fremen tradition, but not as water-fat as an off-worlder. As the light passed across closed eyelids, the small figure stirred. The light winked out.

Now, there was only the sound of even breathing and, faintly behind it, a reassuring drip-drip-drip of water collecting in a catch basin from the windstill far above the cave.

Again, the light appeared in the chamber—slightly larger, a few lumens brighter. This time there was a suggestion of source and movement to it: a hooded figure filled the arched doorway at the chamber's edge and the light originated there. Once more, the light flowed around the chamber, testing, questing. There was a sense of menace in it, a restless dissatisfaction. It avoided the sleeping child, paused on the gridded air inlet at an upper corner, probed a bulge in the green and gold wall hangings which softened the enclosing rock.

Presently, the light winked out. The hooded figure moved with a betraying swish of fabric, took up a station at one side of the arched doorway. Anyone aware of the routine here in Sietch Tabr would have suspected at once that this must be Stilgar, Naib of the Sietch, guardian of the orphaned twins who would one day take up the mantle of their father, Paul Muad'Dib. Stilgar often made night inspections of the twins' quarters, always going first to the chamber where Ghanima slept and ending here in the adjoining room where he could reassure himself that Leto was not threatened.

I'm an old fool, Stilgar thought.

He fingered the cold surface of the light projector before restoring it to the loop in his belt sash. The projector irritated him even while he depended upon it. The thing was a subtle instrument of the Imperium, a device to detect the presence of large living bodies. It had shown only the sleeping children in the royal bedchambers.

Stilgar knew his thoughts and

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emotions were like the light. He could not still a restless inner projection. Some greater power controlled *that* movement. It projected him into this moment where he sensed the accumulated peril. Here lay the magnet for dreams of grandeur throughout the known universe. Here lay temporal riches, secular authority and that most powerful of all mystic talismans: the divine authenticity of Muad'Dib's religious bequest. In these twins—Leto and his sister, Ghanima—an awesome power focused. While they lived, Muad'Dib, though dead, lived in them.

These were not merely nine-year-old children; they were a natural force, objects of veneration and fear. They were the children of Paul Atreides, who had become Muad'Dib, the Mahdi of all the Fremen. Muad'Dib had ignited an explosion of humanity; Fremen had spread from this planet in a jihad, carrying their fervor across the human universe in a wave of religious government whose scope and ubiquitous authority had left its mark on every planet.

Yet these children of Muad'Dib are flesh and blood, Stilgar thought. *Two simple thrusts of my knife would still their hearts. Their water would return to the tribe.*

His wayward mind fell into turmoil at such a thought.

To kill Muad'Dib's children!

But the years had made him wise in introspection. Stilgar knew the origin of such a terrible thought. It came from the left hand of the damned, not from the right hand of the blessed. The ayat and burhan of Life held few mysteries for him. Once he'd been proud to think of himself as Fremen, to think of the desert as a friend, to name his planet Dune in his thoughts and not Arrakis, as it was marked on all of the Imperial star charts.

How simple things were when our Messiah was only a dream, he thought. *By finding our Mahdi we loosed upon the universe countless messianic dreams. Every people subjugated by the jihad now dreams of a leader to come.*

Stilgar glanced into the darkened bedchamber.

If my knife liberated all of those people, would they make a messiah of me?

Leto could be heard stirring restlessly in his bed.

Stilgar sighed. He had never known the Atreides grandfather whose name this child had taken. But many said the moral strength of Muad'Dib had come from that source. Would that terrifying quality of *rightness* skip a generation now? Stilgar found himself unable to answer this question.

He thought: *Sietch Tabr is mine. I rule here. I am a Naib of the Fremen. Without me there would have been no Muad'Dib. These twins, now . . . through Chani, their mother and my kinswoman, my blood flows in their veins. I am there with Muad'Dib and Chani and all the others. What have we done to our universe?*

Stilgar could not explain why such thoughts came to him in the night and why they made him feel so guilty. He crouched within his

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hooded robe. Reality was not at all like the dream. The Friendly Desert which once had spread from pole to pole, was reduced to half its former size. The mythic paradise of spreading greenery filled him with dismay. It was not like the dream. And as his planet changed, he knew he had changed. He had become a far more subtle person than the one-time Sietch chieftain. He was aware now of many things—of statecraft and profound consequences in the smallest decisions. Yet he felt this knowledge and subtlety as a thin veneer covering an iron core of simpler, more deterministic awareness. And that older core called out to him, pleaded with him for a return to cleaner values.

The morning sounds of the sietch began intruding upon his thoughts. People were beginning to move about in the cavern. He felt a breeze against his cheeks: people were going out through the door-seals into the predawn darkness. The breeze spoke of carelessness as it spoke of the time. Warren dwellers no longer maintained the tight water discipline of the old days. Why should they when rain had been recorded on this planet, when clouds were seen, when eight Fremen had been inundated and killed by a flash flood in a wadi? Until that event, the word *drowned* had not existed in the language of Dune. But this was no longer Dune; this was Arrakis . . . and it was morning of an eventful day.

He thought: *Jessica, mother of Muad'Dib and grandmother of these royal twins returns to our planet today. Why does she end her self-imposed exile at this time? Why does she leave the softness and security of Caladan for the dangers of Arrakis?*

And there were other worries: Would she sense Stilgar's doubts? She was a Bene Gesserit witch, graduate of the Sisterhood's deepest training and a Reverend Mother in her own right. Such females were acute and they were dangerous. Would she order him to fall upon his own knife as the Umma-Protector of Liet-Kynes had been ordered?

Would I obey her? he wondered.

He could not answer that question, but now he thought about Liet-Kynes, the planetologist who had first dreamed of transforming the planetwide desert of Dune into the human-supportive green planet which it was becoming. Liet-Kynes had been Chani's father. Without him there would have been no dream, no Chani, no royal twins. The workings of this fragile chain dismayed Stilgar.

How have we met in this place? he asked himself. *How have we combined? For what purpose? Is it my duty to end it all, to shatter that great combination?*

Stilgar admitted the terrible urging within him now. He could make that choice, denying love and family to do what a Naib must do on occasion: make a deadly decision for the good of the tribe. By one view, such a murder represented ultimate betrayal and atrocity. *To kill mere children!* Yet, they were not mere children. They had eaten melange, had shared in the sietch orgy, had probed the desert

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for sandtrout and played the other games of Fremen children . . . and they sat in the Royal Council. Children of such tender years, yet wise enough to sit in the Council. They might be children in flesh, but they were ancient in experience, born with a totality of genetic memory, a terrifying awareness which set their Aunt Alia and themselves apart from all other living humans.

Many times in many nights had Stilgar found his mind circling this *difference* shared by the twins and their aunt; many times had he been awakened from sleep by these torments, coming here to the twins' bedchambers with his dreams unfinished. Now, his doubts came to focus. Failure to make a decision was in itself a decision he knew this. These twins and their aunt had awakened in the womb, knowing there all of the memories passed on to them by their ancestors. Spice addiction had done this, spice addiction of the mothers the Lady Jessica and Chani. The Lady Jessica had borne a son, Muad'Dib, before her addiction. Alia had come after the addiction. That was clear in retrospect. The countless generations of selective breeding directed by the Bene Gesserits had achieved Muad'Dib, but nowhere in the Sisterhood's plans had they allowed for melange. Oh, they knew about this possibility, but they feared it and called it *Abomination*. That was the most dismaying fact. Abomination. They must possess reasons for such a judgment. And if they said Alia was an Abomination, then that must apply equally to the twins, because Chani, too, had been addicted, her body saturated with spice, and her genes had somehow complemented those of Muad'Dib.

Stilgar's thoughts moved in ferment. There could be no doubt these twins went beyond their father. But in which direction? The boy spoke of an ability to *be* his father and had proved it. Even as an infant, Leto had revealed memories which only Muad'Dib should have known. Were there other ancestors waiting in that vast spectrum of memories—ancestors whose beliefs and habits created unspeakable dangers for living humans?

Abominations, the holy witches of the Bene Gesserit said. Yet the Sisterhood coveted the genophase of these children. The witches wanted sperm and ovum without the disturbing flesh which carried them. Was that why the Lady Jessica returned at this time? She had broken with the Sisterhood to support her Ducal mate, but rumor said she had returned to the Bene Gesserit ways.

I could end all of these dreams, Stilgar thought. *How simple it would be.*

And he wondered at himself, that he could contemplate such a choice. Were Muad'Dib's twins responsible for the reality which obliterated the dreams of others? No. They were merely the lens through which light poured to reveal new shapes in the universe.

In torment, his mind reverted to primary Fremen beliefs, and he thought: *God's command comes; so seek not to hasten it. God's it is to*

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show the way; and some do swerve from it.

It was the religion of Muad'Dib which upset Stilgar most. Why did they make a god of Muad'Dib? Why deify a man known to be flesh? Muad'Dib's *Golden Elixir of Life* had created a bureaucratic monster which sat astride human affairs. Government and religion united, and breaking a law became sin. A smell of blasphemy arose like smoke around any questioning of governmental edicts. The guilt of rebellion invoked hellfire and self-righteous judgments.

Yet it was men who created these governmental edicts.

Stilgar shook his head sadly, not seeing the attendants who had moved into the Royal Antechamber for their morning duties.

He fingered the crysknife at his waist, thinking of the past it symbolized, thinking that more than once he had sympathized with rebels whose abortive uprisings had been crushed by his own orders. Confusion washed through his mind and he wished he knew how to obliterate it, returning to the simplicities represented by the knife. But the universe would not turn backward. It was a great engine projected upon the gray void of nonexistence. His knife, if it brought the deaths of the twins, would only reverberate against that void, weaving new complexities to echo through human history, weaving complexities, creating new surges of chaos, inviting humankind to attempt other forms of order and disorder.

Stilgar sighed, growing aware of the movements around him. Yes, these attendants represented a kind of order which was bound around Muad'Dib's twins. They moved from one moment to the next, meeting whatever necessities occurred there. Best to emulate them, Stilgar told himself. *Best meet what comes when it comes.*

I am an attendant yet, he told himself. *And my master is God the Merciful, the Compassionate.* And he quoted to himself: "*Surely, We have put on their necks fetters up to the chin, so their heads are raised; and We have put before them a barrier and behind them a barrier; and We have covered them, so they do not see.*"

Thus was it written in the old Fremen religion.

Stilgar nodded to himself.

To *see*, to anticipate the next moment as Muad'Dib had done with his awesome visions of the future, added a counterforce to human affairs. It created new places for decisions. To be unfettered, yes, that might well indicate a whim of God. Another complexity beyond ordinary human reach.

Stilgar removed his hand from the knife. His fingers tingled with remembrance of it. But the blade which once had glistened in a sandworm's gaping mouth remained in its sheath. Stilgar knew he would not draw this blade now to kill the twins. He had reached a decision. Better to retain that one old virtue which he still cherished: loyalty. Better the complexities one thought he knew than the complexities which defied understanding. Better the now than the future

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of a dream. The bitter taste in his mouth told Stilgar how empty and revolting some dreams could be.

No! No more dreams!

CHALLENGE: "Have you seen The Preacher?"

RESPONSE: "I have seen a sandworm."

CHALLENGE: "What about that sandworm?"

RESPONSE: "It gives us the air we breathe."

CHALLENGE: "Then why do we destroy its land?"

RESPONSE: "Because Shai Hulud (sandworm deified) orders it."

—Riddles of Arrakis
by Harq al-Ada

As was the Fremen custom, the Atreides twins arose an hour before dawn. They yawned and stretched in secret unison in their adjoining chambers, feeling the activity of the cave-warren around them. They could hear attendants in the antechamber preparing breakfast, a simple gruel with dates and nuts blended in liquid skimmed from partially fermented spice. There were glowglobes in the antechamber and a soft yellow light entered through the open archways of the bedchambers. The twins dressed swiftly in the soft light, each hearing the other nearby. As they had agreed, they donned stillsuits against the desert's parching winds.

Presently, the royal pair met in the antechamber, noting the sudden stillness of the attendants. Leto, it was observed, wore a black-edged tan cape over his stillsuit's gray slickness. His sister wore a green cape. The neck of each cape was held by a clasp in the form of an Atreides hawk—gold with red jewels for eyes.

Seeing this finery, Harah, who was one of Stilgar's wives, said: "I see you have dressed to honor your grandmother."

Leto picked up his breakfast bowl before looking at Harah's dark and wind-creased face. He shook his head, then: "How do you know it's not ourselves we honor?"

Harah met his taunting stare without flinching, said: "My eyes are just as blue as yours!"

Ghanima laughed aloud. Harah was always an adept at the Fremen challenge-game. In one sentence she had said: "Don't taunt me, boy. You may be royalty, but we both bear the stigma of melange-addiction: eyes without whites. What Fremen needs more finery or more honor than that?"

Leto smiled, shook his head ruefully. "Harah, my love, if you were but younger and not already Stilgar's I'd make you my own."

Harah accepted the small victory easily, signaling the other attendants to continue preparing the chambers for this day's important activities. "Eat your breakfasts," she said. "You'll need the energy today."

"Then you agree that we're not too fine for our grandmother?" Ghanima asked, speaking around a mouthful of gruel.

"Don't fear her, Ghani," Harah said.

Leto gulped a mouthful of gruel, sent a probing stare at Harah. The woman was infernally folkwise,

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seeing through the game of finery so quickly. "Will she believe we fear her?" Leto asked.

"Like as not," Harah said. "She was our Reverend Mother, remember. I know her ways."

"How has Alia dressed?" Ghanima asked.

"I've not seen her." Harah spoke shortly, turning away.

Leto and Ghanima exchanged a look of shared secrets, bent quickly to their breakfast. Presently, they went out into the great central passage.

Ghanima spoke in one of the ancient languages they shared in genetic memory: "So today we have a grandmother."

"It bothers Alia greatly," Leto said.

"Who likes to give up such authority?" Ghanima asked.

Leto laughed softly, an oddly adult sound from flesh so young. "It's more than that."

"Will her mother's eyes observe what we have observed?"

"And why not?" Leto asked.

"Yes . . . that could be what Alia fears."

"Who knows Abomination better than Abomination?" Leto asked.

"We could be wrong, you know," Ghanima said.

"But we're not." And he quoted from the Bene Gesserit Azhar Book: "It is with reason and terrible experience that we call the pre-born 'Abomination.' For who knows what lost and damned persona out of our evil past may take over the living flesh?"

"I know the history of it," Ghanima said. "But if that's true, why don't we suffer from this inner assault?"

"Perhaps our parents stand guard within us," Leto said.

"Then why not guardians for Alia as well?"

"I don't know. It could be because one of her parents remains among the living. It could be that we are young and strong as yet. Perhaps when we're older and more cynical . . ."

"We must take great care with this grandmother," Ghanima said.

"And not discuss this Preacher who wanders our planet speaking heresy?"

"You don't really think he's our father!"

"I make no judgment on it, but Alia fears him."

Ghanima shook her head sharply. "I don't believe this Abomination nonsense!"

"You've just as many memories as I have," Leto said. "You can believe what you want to believe."

"You think it's because we haven't dared the spice trance and Alia has," Ghanima said.

"That's exactly what I think."

They fell silent, moving out into the flow of people in the central passage. It was cool in Sietch Tabr, but the stillsuits were warm and the twins kept their condenser hoods thrown back from their red hair. Their faces betrayed the stamp of shared genes: generous mouths, widely-set eyes of spice addict blue-on-blue.

Leto was first to note the approach of their Aunt Alia.

"Here she comes now," he said, shifting to Atreides battle language.

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Ghanima nodded to her aunt as Alia stopped in front of them, said: "A *spoil of war* greets her illustrious relative." Using the same Chakobsa language, Ghanima emphasized the meaning of her own name–*Spoil of War.*

"You see, Beloved Aunt," Leto said, "we prepare ourselves for today's encounter with your mother."

Alia, the one person in the teeming royal household who harbored not the faintest surprise at adult behavior from these children, glared from one to the other, then: "Hold your tongues, both of you!"

Alia's bronze hair was pulled back into two golden water rings. Her oval face held a frown, the wide mouth with its downturned hint of self-indulgence was held in a tight line. Worry wrinkles fanned the corners of her blue-on-blue eyes.

"I've warned both of you how to behave today," Alia said. "You know the reasons as well as I."

"We know your reasons, but you may not know ours," Ghanima said.

"Ghani!" Alia growled.

Leto glared at his aunt, said: "Today of all days, we will not pretend to be simpering infants!"

"No one wants you to simper," Alia said. "But we think it unwise for you to provoke dangerous thoughts in my mother. Irulan agrees with me. Who knows what role the Lady Jessica will choose? She is, after all, Bene Gesserit."

Leto shook his head, wondering: *Why does Alia not see what we suspect? Is she too far gone?* And he

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made special note of the subtle gene-markers on Alia's face which betrayed the presence of her maternal grandfather. The Baron Vladimir Harkonnen had not been a pleasant person. At this observation, Leto felt the vague stirrings of his own disquiet, thinking: *My own ancestor, too.*

He said: "The Lady Jessica was trained to rule."

Ghanima nodded. "Why does she choose this time to come back?"

Alia scowled, then: "Is it possible she merely wants to see her grandchildren?"

Ghanima thought: *That's what you hope, my dear Aunt. But it's damn well not likely.*

"She cannot rule here," Alia said. "She has Caladan. That should be enough."

Ghanima spoke placatingly: "When our father went into the desert to die, he left you as Regent. He . . ."

"Have you any complaint?" Alia demanded.

"It was a reasonable choice," Leto said, following his sister's lead. "You were the one person who knew what it was like to be born as we were born."

"It's rumored that my mother has returned to the Sisterhood," Alia said, "and you both know what the Bene Gesserit think about . . ."

"Abomination," Leto said.

"Yes!" Alia bit the word off.

"Once a witch, always a witch—so it's said," Ghanima said.

Sister, you play a dangerous game, Leto thought, but he followed her lead, saying: "Our grandmother was a woman of greater simplicity than others of her kind. You share her memories, Alia; surely you must know what to expect."

"Simplicity!" Alia said, shaking her head, looking around her at the thronged passage, then back to the twins. "If my mother were less complex, neither of you would be here—nor I. I would have been her firstborn and none of this . . ." A shrug, half shudder, moved her shoulders. "I warn you two, be very careful what you do today." Alia looked up. "Here comes my guard."

"And you still don't think it safe for us to accompany you to the spaceport?" Leto asked.

"Wait here," Alia said. "I'll bring her back."

Leto exchanged a look with his sister, said: "You've told us many times that the memories we hold from those who've passed before us lack a certain usefulness until we've experienced enough with our own flesh to make them reality. My sister and I believe this. We anticipate dangerous changes with the arrival of our grandmother."

"Don't stop believing that," Alia said. She turned away to be enclosed by her guards and they moved swiftly down the passage toward the State Entrance where ornithopters awaited them.

Ghanima wiped a tear from her right eye.

"Water for the dead?" Leto whispered, taking his sister's arm.

Ghanima drew in a deep, sighing breath, thinking of how she had

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observed her aunt, using the way she knew best from her own accumulation of ancestral experiences. "Spice trance did it?" she asked, knowing what Leto would say.

"Do you have a better suggestion?"

"For the sake of argument, why didn't our father . . . or even our grandmother succumb?"

He studied her a moment, then: "You know the answer as well as I do. They had secure personalities by the time they came to Arrakis. The spice trance -well . . ." He shrugged. "They weren't born into this world already possessed of their ancestors. Alia, though . . ."

"Why didn't she believe the Bene Gesserit warnings?" Ghanima chewed her lower lip. "Alia had the same information to draw upon that we do."

"They already were calling her Abomination," Leto said. "Don't you find it tempting to find out if you're stronger than all of those others . . ."

"No, I don't!" Ghanima looked away from her brother's probing stare, shuddered. She had only to consult her genetic memories and the Sisterhood's warnings took on vivid shape. The pre-born observably tended to become adults of nasty habits. And the likely cause . . . Again, she shuddered.

"Pity we don't have a few pre-born in our ancestry," Leto said.

"Perhaps we do."

"But we'd . . . ahh, yes, that old question we've never been able to resolve to our satisfaction: Do we really have open access to every ancestor's total file of experiences?"

From his own inner turmoil, Leto knew how this conversation must be disturbing his sister. They'd considered this question many times, always without conclusion. He said: "We must delay and delay and delay every time she urges the trance upon us. Extreme caution with a spice overdose, that's our best course."

"An overdose would have to be pretty large," Ghanima said.

"Our tolerance is probably high," he agreed. "Look how much Alia requires."

"I pity her," Ghanima said. "The lure of it must've been subtle and insidious, creeping up on her . . ."

"She's a victim, yes," Leto said. "Abomination."

"We could be wrong."

"True."

"I always wonder," Ghanima mused, "if the next ancestral memory I seek will be the one which . . ."

"The past is no farther away than your pillow," Leto said.

"We must make the opportunity to discuss this with our grandmother."

"So her memory within me urges," Leto said.

Ghanima met his gaze, then: "Too much knowledge never makes for simple decisions."

The Sietch at the desert's rim
Was Liet's, was Kynes',
Was Stilgar's, was Muad'Dib's
And, once more, was Stilgar's.
The Naibs one by one sleep in the sand.
But the Sietch endures.

-from a Fremen song

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Alia felt her heart pounding as she walked away from the twins. For a few pulsing seconds, she had felt herself near compulsion to stay with them and beg their help. What a foolish weakness! Memory of it sent a warning stillness through Alia. Would these twins dare practice prescience? The path which had engulfed their father must lure them—spice trance with its visions of the future wavering like gauze blown on a fickle wind.

Why cannot I see the future? Alia wondered. *Much as I try, why does it elude me?*

The twins must be made to try, she told herself. They could be lured into it. They had the curiosity of children and it was linked to memories which traversed millennia.

Just as I have, Alia thought.

Her guards opened the moisture seals at the State Entrance of the Sietch, stood aside as she emerged onto the landing lip where the ornithopters waited. There was a wind from the desert blowing dust across the sky, but the day was bright. Emerging from the glowglobes of the Sietch into the daylight sent her thoughts outward.

Why was the Lady Jessica returning at this moment? Had stories been carried to Caladan, of how the Regency was . . .

"We must hurry, My Lady," one of her guards said, raising his voice above the wind sounds.

Alia allowed herself to be helped into her ornithopter, secured the safety harness, but her thoughts went leaping ahead.

Why now?

As the ornithopter's wings dipped and the craft went skidding into the air, she felt the pomp and power of her position as physical things—but they were fragile, oh, how fragile.

Why now, when her plans were not completed?

The dust mists drifted, lifting, and she could see the bright sunlight upon the changing landscape of the planet: broad reaches of green plants where parched earth had once dominated.

Without a vision of the future, I could fail. Oh, what magic I could perform if only I could see as Paul saw. Not for me the bitterness which prescient visions brought.

A tormenting hunger shuddered through her and she wished she could put aside the power. Oh, to be as others were—blind in that safest of all blindnesses, living only the hypnoidal half-life into which birth-shock precipitated most humans. But no! She had been born an Atreides, victim of that eons-deep awareness inflicted by her mother's spice addiction.

Why does my mother return today?

Gurney Halleck would be with her—ever the devoted servant, the hired killer of ugly mien, loyal and straightforward, a musician who played murder with a sliptip, or entertained with equal ease upon his nine-string baliset. Some said he'd become her mother's lover. That would be a thing to ferret out: it might prove a most valuable leverage.

The wish to be as others were left her.

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Leto must be lured into the spice trance.

She recalled asking the boy how he would deal with Gurney Halleck. And Leto, sensing undercurrents in her question, had said Halleck was loyal "to a fault," adding: "He adored . . . my father."

She'd noted the small hesitation. Leto had almost said "me" instead of "my father." Yes, it was hard at times to separate the genetic memory from the chord of living flesh. Gurney Halleck would not make that separation easier for Leto.

A harsh smile touched Alia's lips.

Gurney had chosen to return to Caladan with the Lady Jessica after Paul's death. His return would tangle many things. Coming back to Arrakis, he would add his own complexities to the existing lines. He had served Paul's father—and thus the succession went: Leto I to Paul to Leto II. And out of the Bene Gesserit breeding program: Jessica to Alia and to Ghanima—a branching line. Gurney, adding to the confusion of identities, might prove valuable.

What would he do if he discovered we carry the blood of Harkonnens, the Harkonnens he hates so bitterly?

The smile on Alia's lips became introspective. The twins were, after all, children. They were like children with countless parents, whose memories belonged both to others and to self. They would stand at the lip of Sietch Tabr and watch the track of their grandmother's ship landing in the Arrakeen Basin. That burning mark of a ship's passage visible on the sky . . . would it make Jessica's arrival more real for her grandchildren?

My mother will ask me about their training, Alia thought. *Do I mix prana-bindu disciplines with a judicious hand? And I will tell her that they train themselves—just as I did. I will quote her grandson to her: "Among the responsibilities of command is the necessity to punish . . . but only when the victim demands it."*

It came to Alia then that if she could only focus the Lady Jessica's attention sharply enough onto the twins, others might escape a closer inspection.

Such a thing could be done. Leto was very like Paul. And why not? He could be Paul whenever he chose. Even Ghanima possessed this shattering ability.

Just as I can be my mother or any of the others who've shared their lives with us.

She veered away from this thought, staring out at the passing landscape of the Shield Wall, then: *How was it to leave the warm safety of water-rich Caladan and return to Arrakis, to this Dune planet where her Duke was murdered and her son died a martyr?*

Why did the Lady Jessica come back at this time?

Alia found no answer—nothing certain. She could share another's ego-awareness, but when experiences went their separate ways, then motives diverged as well. The stuff of decisions lay in private actions taken by individuals. For the pre-born, the *many-born* Atreides, this remained the paramount reality, in itself another kind of birth:

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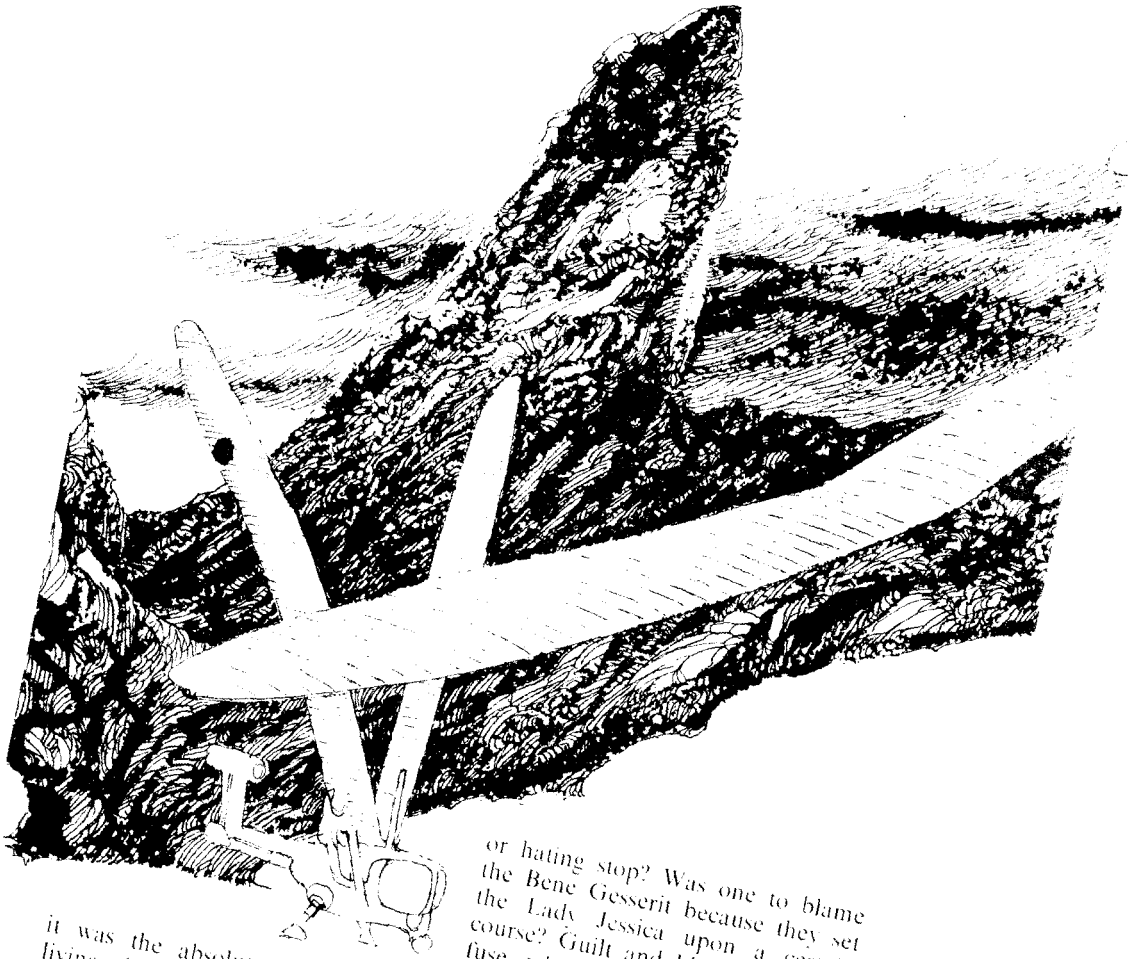

it was the absolute separation of living, breathing flesh when that flesh left the womb which had afflicted it with multiple awareness.

Alia saw nothing strange in loving and hating her mother simultaneously. It was a necessity, a required balance without room for guilt or blame. Where could loving or hating stop? Was one to blame the Bene Gesserit because they set the Lady Jessica upon a certain course? Guilt and blame grew diffuse when memory covered millennia. The Sisterhood had only been seeking to breed a Kwisatz Haderach—the male counterpart of a fully developed Reverend Mother . . . and more: a human of superior sensitivity and awareness, the Kwisatz Haderach who could be many places simultaneously. And the Lady Jessica, merely a pawn in that breeding program, had the bad

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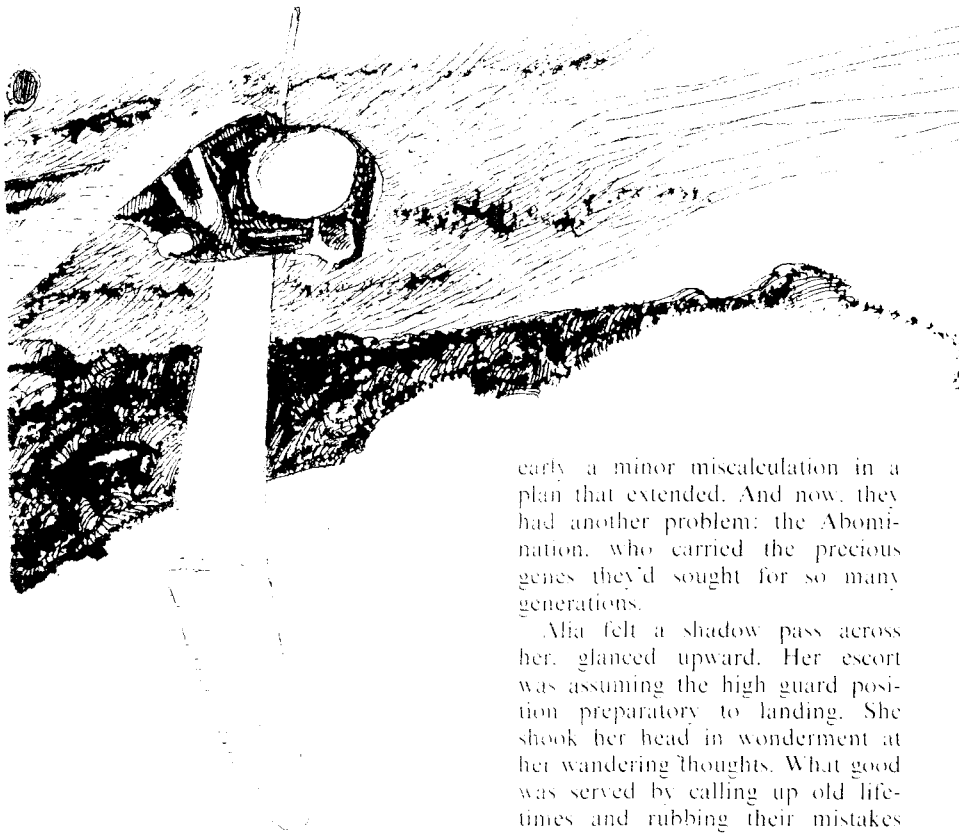

taste to fall in love with the breeding partner to whom she had been assigned. Responsive to her beloved Duke's wishes, she'd produced a son instead of the daughter which the Sisterhood had commanded as the firstborn.

Leaving me to be born after she became addicted to the spice! And now they don't want me. Now, they fear me! With good reason!

They'd achieved Paul, their Kwisatz Haderach, one lifetime too early, a minor miscalculation in a plan that extended. And now, they had another problem: the Abomination, who carried the precious genes they'd sought for so many generations.

Alia felt a shadow pass across her, glanced upward. Her escort was assuming the high guard position preparatory to landing. She shook her head in wonderment at her wandering thoughts. What good was served by calling up old lifetimes and rubbing their mistakes together? This was a new lifetime.

Duncan Idaho had put his *mentat* awareness to the question of why Jessica returned at this time, evaluating the problem in the human-computer fashion which was his gift. He said she returned to take over the twins for the Sisterhood. The twins, too, carried those precious genes. Duncan could well be right. That might be enough to take the Lady Jessica out of her self-imposed seclusion on Caladan. If the Sisterhood commanded . . . Well, why else would she come back to the scenes of so much that must be shatteringly painful to her?

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"We shall see," Alia muttered.

She felt the ornithopter touch down on the roof of her Keep, a positive and jarring punctuation which filled her with grim anticipation.

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melange (mé-lange *also* ma, lanj) n-s, origin uncertain (thought to derive from ancient Terran Franzh)—a, mixture of spices; b, spice of Arrakis (Dune) with geriatric properties first noted by Yanshuph Ashkoko, royal chemist in reign of Shakkad the Wise; Arrakeen melange, found only in deepest desert sands of Arrakis, linked to prophetic visions of Paul Muad'Dib (Atreides), first Fremen Mahdi; also employed by Spacing Guild Navigators and the Bene Gesserit.

—Dictionary Royal
Fifth Edition

The two big cats came over the rocky ridge in the dawn light, loping easily. They were not really into the passionate hunt as yet, merely looking over their territory. They were called Laza Tigers, a special breed brought here to the planet Salusa Secundus almost eight thousand years past. Genetic manipulation of the ancient Terran stock had erased some of the original tiger features and refined other elements. The fangs remained long. Their faces were wide, eyes alert and intelligent. The paws were enlarged to give them support on uneven terrain and their sheathed claws could extend some ten centimeters, sharpened at the ends into razor tips by abrasive compression of the sheath. Their coats were a flat and even tan which made them almost invisible against sand.

They differed in another way from their ancestors: servo-stimulators had been implanted in their brains while they were cubs. The stimulators made them pawns of whoever possessed the transmitter.

It was cold and as the cats paused to scan the terrain, their breath made fog on the air. Around them lay a region of Salusa Secundus left sere and barren, a place which harbored a scant few sandtrout smuggled from Arrakis and kept precariously alive in the dream that the melange monopoly might be broken. Where the cats stood the landscape was marked by tan rocks and a scattering of sparse bushes, silvery green in the long shadows of the morning sun.

With only the slightest movement, the cats grew suddenly alert. Their eyes turned slowly left, then their heads turned. Far down in the scarred land, two children struggled up a dry wash hand in hand. The children appeared to be of an age, perhaps nine or ten standard years. They were red-haired and wore stillsuits partly covered by rich white bourkas which bore all around the hem and at the forehead the hawk crest of House Atreides worked in flame jewel threads. As they walked, the children chattered happily and their voices carried clearly to the hunting cats. The Laza Tigers knew this game; they had played it before, but they remained quiescent, awaiting the triggering of the chase signal in their servo-stimulators.

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Now, a man appeared on the ridgetop behind the cats. He stopped and surveyed the scene: cats, children. The man wore a Sardaukar working uniform in gray and black with insignia of a Levenbrech, aide to a Bashar. A harness passed behind his neck and under his arms to carry the servo-transmitter in a thin package against his chest where the keys could be reached easily by either hand.

The cats did not turn at his approach. They knew this man by sound and smell. He scrambled down to stop two paces from the cats, mopped his forehead. The air was cold, but this was hot work. Again, his pale eyes surveyed the scene: cats, children. He pushed a damp strand of blonde hair back under his black working helmet, touched the implanted microphone in his throat.

"The cats have them in sight."

The answering voice came to him through receivers implanted behind each ear. "We see them."

"This time?" the Levenbrech asked.

"Will they do it without a chase command?" the voice countered.

"They're ready," the Levenbrech said.

"Very well. Let us see if four conditioning sessions will be enough."

"Tell me when you're ready."

"Any time."

"Now, then," the Levenbrech said.

He touched a red key on the right hand side of his servo-transmitter, first releasing a bar which shielded the key. Now, the cats stood without any transmitted restraints. He held his hand over a black key below the red one, ready to stop the animals should they turn on him. But they took no notice of him, crouched and began working their way down the ridge toward the children. Their great paws slid out in smooth gliding motions.

The Levenbrech squatted to observe, knowing that somewhere around him a hidden transeye carried this entire scene to a secret monitor within the Keep where his Prince lived.

Presently, the cats began to lope, then to run.

The children, intent on climbing through the rocky terrain, still had not seen their peril. One of them laughed, a high and piping sound in the clear air. The other child stumbled and, recovering balance, turned, saw the cats. The child pointed. "Look!"

Both children stopped and stared at the interesting intrusion into their lives. They were still standing when the Laza Tigers hit them, one cat to each child. The children died with a casual abruptness, necks broken swiftly. The cats began to feed.

"Shall I recall them?" the Levenbrech asked.

"Let them finish. They did well. I knew they would; this pair is superb."

"Best I've ever seen," the Levenbrech agreed.

"Very good, then. Transport is being sent for you. We will sign off now."

The Levenbrech stood and

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stretched. He refrained from looking directly off to the high ground on his left where a telltale glitter had revealed the location of the transeye which had relayed his fine performance to his Bashar far away in the green lands of the Capitol. The Levenbrech smiled. There would be a promotion for this day's work. Already, he could feel a Bator's insignia at his neck, and someday, Burseg . . . and even, one day, Bashar. People who served well in the corps of Farad'n, grandson of the late Shaddam IV, earned rich promotions. One day, when the Prince was seated on his rightful throne, there would be even greater promotions. A Bashar's rank might not be the end of it. There were Baronies and Earldoms to be had on the many worlds of this realm . . . once the twin Atreides were removed.

The Fremen must return to his original faith, to its genius in forming human communities; he must return to the past where that lesson of survival was learned in the struggle with Arrakis. The only business of the Fremen should be that of opening his soul to the inner teachings. The worlds of the Imperium, the Landsraad and the CHOAM Confederacy have no message to give him. They will only rob him of his soul.

—The Preacher at Arrakeen

All around the Lady Jessica—reaching far out into the dun flatness of the landing plain upon which her transport rested, crackling and sighing after its dive from space, stood an ocean of humanity. She estimated half a million people were there and perhaps only a third of them pilgrims. They stood in awesome silence, attention fixed on the transport's exit platform, whose shadowy hatchway concealed her and her party.

It lacked two hours until noon, but already the air above that throng reflected a dusty shimmering in promise of the day's heat.

Jessica touched her silver-flecked copper hair where it framed her oval face beneath the aba hood of a Reverend Mother. She knew she did not look her best after the long trip, and the black of the aba was not her best color. But she had worn this garment here before. The significance of the aba robe would not be lost upon the Fremen. She sighed. Space travel did not agree with her and there'd been that added burden of memories . . . the other trip from Caladan to Arrakis when her Duke had been forced into this fief against his judgment.

Slowly, probing with her Bene Gesserit-trained ability to detect significant minutiae, she scanned the sea of people. There were stillsuit hoods of dull gray, garments of Fremen from the deep desert; there were white-robed pilgrims with penitence marks on their shoulders; there were scattered pockets of rich merchants, hoodless in light clothing to flaunt their disdain for water loss in Arrakeen's parching air . . . and there was the delegation from the Society of the Faithful, green robed and heavily hooded, standing aloof within the sanctity of their own group.

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Only when she lifted her gaze from the crowd did the scene take on any similarity to that which had greeted her upon her arrival with her beloved Duke. How long ago had that been? *More than twenty years.* She did not like to think on those intervening heartbeats. Time lay within her like a dead weight and it was as though her years away from this planet had never been.

Once more into the dragon's mouth, she thought.

Here, upon this plain, her son had wrested the Imperium from the late Shaddam IV. A convulsion of history had imprinted this place into men's minds and beliefs.

She heard the restless stirring of the entourage behind her and again, she sighed. They must wait for Alia, who had been delayed. Alia's party could be seen now approaching from the far edge of the throng, creating a human wave as a wedge of guards opened a passage.

Jessica scanned the landscape once more. Many differences submitted to her searching stare. A prayer balcony had been added to the landing field's control tower. And visible far off to the left across the plain stood the awesome pile of plasteel which Paul had built as his fortress—his "Sietch above the sand." It was the largest integrated single construction ever to rise from the hand of man. Entire cities could have been housed within its walls and room to spare. Now, it housed the most powerful governing force in the Imperium, Alia's "Society of the Faithful" which she

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had built upon her brother's body.

That place must go, Jessica thought.

Alia's delegation had reached the foot of the exit ramp and stood there expectantly. Jessica recognized Stilgar's craggy features. And God forfend! There stood the Princess Irulan hiding her savagery in that seductive body with its cap of golden hair exposed by a vagrant breeze. Irulan seemed not to have aged a day: it was an affront. And there, at the point of the wedge, was Alia, her features impudently youthful, her eyes staring upward into the hatchway's shadows. Jessica's mouth drew into a straight line and she scanned her daughter's face. A leaden sensation pulsed through Jessica's body then and she heard the surf of her own life within her ears. The rumors were true! Horrible! Horrible! Alia had fallen into the forbidden way. The evidence was there for the initiate to read. *Abomination!*

In the few moments it took her to recover, Jessica realized how much she had hoped to find the rumors false.

What of the twins? she asked herself. *Are they lost, too?*

Slowly, as befitted the mother of a god, Jessica moved out of the shadows and onto the lip of the ramp. Her entourage remained behind as instructed. These next few moments were the crucial ones. Jessica stood alone in full view of the throng. She heard Gurney Halleck cough nervously behind her. Gurney had objected: *"Not even a shield on you? Gods below, woman! You're insane!"*

But among Gurney's most valuable features was a core of obedience. He would say his piece and then he would obey. Now, he obeyed.

The human sea emitted a sound like the hiss of a giant sandworm as Jessica emerged. She raised her arms in the benedictory to which the priesthood had conditioned the Imperium. With significant pockets of tardiness, but still like one giant organism, the people sank to their knees. Even the official party complied.

Jessica had marked out the places of delay and she knew that other eyes behind her and among her agents in the throng had memorized a temporary map with which to seek out the tardy.

As Jessica remained with her arms upraised, Gurney and his men emerged. They moved swiftly past her down the ramp, ignoring the official party's startled looks, joining the agents who identified themselves by handsign. Quickly, they fanned out through the human sea, leaping knots of kneeling figures, dashing through narrow lanes. A few of their targets saw the danger and tried to flee. They were the easiest: a thrown knife, a garrote loop and the runners went down. Others were herded out of the press, hands bound, feet hobbled.

Through it all, Jessica stood with arms outstretched, blessing by her presence, keeping the throng subservient. She read the signs of spreading rumors though, and knew the dominant one because it had been planted: *"The Reverend Mother returns to weed out the*

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slackers. Bless the mother of our Lord!"

When it was over—a few dead bodies sprawled on the sand, captives removed to holding pens beneath the landing tower—Jessica lowered her arms. Perhaps three minutes had elapsed. She knew there was little likelihood Gurney and his men had taken any of the ringleaders, the ones who posed the most potent threat. They would be the alert and sensitive ones. But the captives would contain some interesting fish as well as the usual culls and dullards.

Jessica lowered her arms and the people stood and cheered.

As though nothing untoward had happened, Jessica walked alone down the ramp, avoiding her daughter, singling out Stilgar for concentrated attention. The black beard which fanned out across the neck of his stillsuit hood like a wild data contained flecks of gray, but his eyes carried that same whiteless intensity they'd presented to her on their first encounter in the desert. Stilgar knew what had just occurred and approved. Here stood a true Fremen Naib, a leader of men and capable of bloody decisions. His first words were completely in character.

"Welcome home, My Lady. It's always a pleasure to see direct and effective action."

Jessica allowed herself a tiny smile. "Close the port, Stil. No one leaves until we've questioned those we took."

"It's already done, My Lady," Stilgar said. "Gurney's man and I planned this together."

"Those were your men, then, the ones who helped."

"Some of them, My Lady."

She read the hidden reservations, nodded. "You studied me pretty well in those old days, Stil."

"As you once were at pains to tell me, My Lady, one observes the survivors and learns from them."

Alia stepped forward then and Stilgar stood aside while Jessica confronted her daughter.

Knowing there was no way to hide what she had learned, Jessica did not even try concealment. Alia could read the minutiae when she needed, could read as well as any adept of the Sisterhood. She would already know by Jessica's behavior what had been seen and interpreted. They were enemies for whom the word *mortal* touched only the surface.

Alia chose anger as the easiest and most proper reaction.

"How dare you plan an action such as this without consulting me?" she demanded, pushing her face close to Jessica's.

Jessica spoke mildly: "As you've just heard, Gurney didn't even let me in on the whole plan. It was thought . . ."

"And you, Stilgar!" Alia said, rounding on him. "To whom are *you* loyal?"

"My oath is to Muad'Dib's children," Stilgar said, speaking stiffly. "We have removed a threat to them."

"And why doesn't that fill you with joy . . . Daughter?" Jessica asked.

Alia blinked, glanced once at her mother, suppressed the inner tem-

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pest and even managed a straight-toothed smile. "I *am* filled with joy . . . Mother," she said. And, to her own surprise, Alia found that she *was* happy, experiencing a terrible delight that it was all out in the open at last between herself and her mother. The moment she had dreaded was past and the power balance had not really been changed. "We will discuss this in more detail at a more convenient time," Alia said, speaking both to her mother and Stilgar.

"But of course," Jessica said, turning with a movement of dismissal to face the Princess Irulan.

For a few brief heartbeats, Jessica and the Princess stood silently studying each other—two Bene Gesserits who had broken with the Sisterhood for the same reason: love . . . both of them for love of men who now were dead. This Princess had loved Paul in vain, becoming his wife but not his mate. And now, she lived only for the children given to Paul by his Fremen concubine, Chani.

Jessica spoke first: "Where are my grandchildren?"

"At Sietch Tabr."

"Too dangerous for them here: I understand."

Irulan permitted herself a faint nod. She had observed the interchange between Jessica and Alia, but put upon it an interpretation for which Alia had prepared her. "*Jessica has returned to the Sisterhood and we both know they have plans for Paul's children.*" Irulan had never been the most accomplished adept in the Bene Gesserit—valuable more for the fact that she was a daughter of Shaddam IV than for any other reason: often too proud to exert herself in extending her capabilities. Now, she chose sides with an abruptness which did no credit to her training.

"Really, Jessica," Irulan said, "the Royal Council should have been consulted. It was wrong of you to work only through . . ."

"Am I to believe none of you trust Stilgar?" Jessica asked.

Irulan possessed the wit to realize there could be no answer to such a question. She was glad that the priestly delegates, unable to contain their impatience any longer, pressed forward. She exchanged a glance with Alia, thinking: *Jessica's as haughty and certain of herself as ever!* A Bene Gesserit axiom arose unbidden in her mind, though: "*The haughty do but build castle walls behind which they try to hide their doubts and fears.*" Could that be true of Jessica? Surely not. Then it must be a pose. But for what purpose? The question disturbed Irulan.

The priests were noisy in their possession of Muad'Dib's mother. Some only touched her arms, but most bowed low and spoke greetings. At last, the leaders of the delegation took their turn with the Most Holy Reverend Mother, accepting the ordained role—'The first shall be last' with practiced smiles, telling her that the official *Lustration* ceremony awaited her at the Keep, Paul's old fortress-stronghold.

Jessica studied the pair, finding them repellent. One was called Javid, a young man of surly features and round cheeks, shadowed eyes

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which could not hide the suspicions lurking in their depths. The other was Zebataleph, second son of a Naib she'd known in her Fremen days, as he was quick to remind her. He was easily classified: jollity linked with ruthlessness, a thin face with blonde beard, an air about him of secret excitements and powerful knowledge. Javid she judged far more dangerous of the two, a man of private counsel, simultaneously magnetic and . . . she could find no other word: *repellent.* She found his accents strange, full of old Fremen pronunciations, as though he'd come from some isolated pocket of his people.

"Tell me, Javid," she said, "whence come you?"

"I am but a simple Fremen of the desert," he said, every syllable giving the lie to the statement.

Zebataleph intruded with an offensive deference, almost mocking: "We have much to discuss of the old days, My Lady. I was one of the first, you know, to recognize the holy nature of your son's mission."

"But you weren't one of his Fedaykin," she said.

"No, My Lady. I possessed a more philosophic bent; I studied for the priesthood."

And insured the preservation of your skin, she thought.

Javid said: "They await us at the Keep, My Lady."

Again, she found the strangeness of his accent an open question demanding an answer. "Who awaits us?" she asked.

"The Convocation of the Faith, all those who keep bright the name and the deeds of your holy son," Javid said.

Jessica glanced around her, saw Alia smiling at Javid, asked: "Is this man one of your appointees, Daughter?"

Alia nodded. "A man destined for great deeds."

But Jessica saw that Javid had no pleasure in this attention, marked him for Gurney's special study. And there came Gurney with five trusted men, signaling that they had the suspicious laggards under interrogation. He walked with the rolling stride of a powerful man, glance flicking left, right, all around, every muscle flowing through the relaxed alertness she had taught him out of the Bene Gesserit *prana-bindu* manual. He was an ugly lump of trained reflexes, a killer and altogether terrifying to some, but Jessica loved him and prized him above all other living men. The scar of an inkvine whip rippled along his jaw, giving him a sinister appearance, but a smile softened his face as he saw Stilgar.

"Well done, Stil," he said. And they gripped arms in the Fremen fashion.

"The *Lustration,*" Javid said, touching Jessica's arm.

Jessica drew back, chose her words carefully in the controlled power of Voice, her tone and delivery calculated for a precise emotional effect upon Javid and Zebataleph: "I returned to *Dune* to see my grandchildren. Must we take time for this priestly nonsense?"

Zebataleph reacted with shock,

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his mouth dropping open, eyes alarmed, glancing about at those who had heard. The eyes marked each listener. *Priestly nonsense!* What effect would such words have coming from the mother of their messiah?

Javid, however, confirmed Jessica's assessment. His mouth hardened, then smiled. The eyes did not smile, nor did they waver to mark the listeners. Javid already knew each member of this party. He had an earshot map of those who would be watched with special care from this point onward. Only seconds later, Javid stopped smiling with an abruptness which said he knew how he had betrayed himself. Javid had not failed to do his homework: he knew the observational powers possessed by the Lady Jessica. A short, jerking nod of his head acknowledged those powers.

In a lightning flash of mentation, Jessica weighed the necessities. A subtle hand signal to Gurney would bring Javid's death. It could be done here for effect or in quiet later and be made to appear an accident.

She thought: *When we try to conceal our innermost drives, the entire being screams betrayal.* Bene Gesserit training turned upon this revelation—raising the adepts above it and teaching them to read the open flesh of others. She saw Javid's intelligence as valuable, a temporary weight in the balance. If he could be won over, he could be the link she needed, the line into the Arrakeen priesthood. And he was Alia's man.

Jessica said: "My official party must remain small. We have room for one addition, however. Javid, you will join us. Zebataleph, I am sorry. And . . . Javid, I will attend this, this ceremony if you insist."

Javid allowed himself a deep breath and a low-voiced "As Muad'Dib's mother commands." He glanced to Alia, to Zebataleph, back to Jessica. "It pains me to delay the reunion with your grandchildren, but there are, ahhh, reasons of state . . ."

Jessica thought: Good. *He's a businessman above all else. Once we've determined the proper coinage, we'll buy him.* And she found herself enjoying the fact that he insisted on his precious ceremony. This little victory would give him power with his fellows and they both knew it. Accepting his *Lustration* could be a down payment on later services.

"I presume you've arranged transportation," she said.

I give you the desert chameleon whose ability to blend itself into the background tells you all you need to know about the roots of ecology and the foundations of a personal identity.

—Book of Diatribes
from the Hayt Chronicle

Leto sat playing a small baliset which had been sent to him on his fifth birthday by that consummate artist of the instrument, Gurney Halleck. In four years of practice, Leto had achieved a certain fluency, although the two bass side strings still gave him trouble. He

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had found the baliset soothing, however, for particular feelings of upset—a fact which had not escaped Ghanima. He sat now in twilight on a rock shelf at the southernmost extremity of the craggy outcropping which sheltered Sietch Tabr. Softly, he strummed the baliset.

Ghanima stood behind him, her small figure radiating protest. She had not wanted to come here into the open after learning from Stilgar that their grandmother was delayed in Arrakeen. She particularly objected to coming here with nightfall near. Attempting to hurry her brother, she asked: "Well, what is it?"

For answer, he began another tune.

For the first time since accepting the gift, Leto felt intensely aware that this baliset had originated with a master craftsman on Caladan. He possessed inherited memories which could inflict him with profound nostalgia for that beautiful planet where House Atreides had ruled. Leto had but to relax his inner barriers in the presence of this music and he would hear memories from those times when Gurney had employed the baliset to beguile his friend and charge, Paul Atreides. With the baliset sounding in his own hands, Leto felt himself more and more dominated by his father's psychical presence. Still, he played, relating more strongly to the instrument with every second that passed. He sensed the absolute idealized summation within himself which *knew* how to play this baliset, but nine-year-old muscles had not yet been conditioned to that inner awareness.

Ghanima tapped her foot impatiently, unaware that she matched the rhythm of her brother's playing.

Setting his mouth in a grimace of concentration, Leto broke from the familiar music and tried a song more ancient than any that even Gurney had ever played. It had been old when Fremen migrated to their fifth planet. The words echoed a Zensunni theme, and he heard them in his memory while his fingers elicited a faltering version of the tune.

"Nature's beauteous form
Contains a lovely essence
Called by some—decay.
By this lovely presence
New life finds its way.
Tears shed silently
Are but water of the soul:
They bring new life
To the pain of being—
A separation from that seeing
Which death makes whole."

Ghanima spoke behind him as he strummed the final note. "Why that mucky old song?"

"Because it fits."

"Will you play it for Gurney?"

"Perhaps."

"He'll call it moody nonsense."

"I know."

Leto peered back over his shoulder at Ghanima. There was no surprise in him that she knew the song and its lyrics, but he felt a sudden onset of awe at the singleness of their twinned lives. One of them could die and yet remain alive in the other's consciousness, every shared memory intact: they were that close. He found himself

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frightened by the timeless web of that closeness, broke his gaze away from her. The web contained gaps, he knew. His fear arose from the newest of those gaps. He felt their lives beginning to separate and wondered: *How can I tell her of this thing which has happened only to me?*

He peered out over the desert, seeing the deep shadows behind the barachans—those high, crescent-shaped migratory dunes which moved like waves around Arrakis. This was *Kedem*, the inner desert, and its dunes were marked rarely these days by the irregularities of a giant worm's progress. Sunset drew bloody streaks over the dunes, imparting a fiery light to the shadow edges. A hawk falling from the crimson sky captured his awareness as it captured a rock partridge in flight.

Directly beneath him on the desert floor plants grew in a profusion of greens, watered by a qanat which flowed partly in the open, partly in covered tunnels. The water came from giant windtrap collectors behind him on the highest point of rock. The green flag of the Atreides flew openly there.

Water and green.

The new symbols of Arrakis: water and green.

A diamond-shaped oasis of planted dunes spread beneath his high perch, catching his attention into a sharp Fremen awareness. The bell call of a nightbird came from the cliff below him, and it amplified the sensation that he lived this moment out of a wild past.

Nous avons changé tout cela, he thought, falling easily into one of the ancient tongues which he and Ghanima employed in private. "*We have altered all of that.*" He sighed. *Oublier je ne puis.* "*I cannot forget.*"

Beyond the oasis, he could see in this failing light the land Fremen called "the emptiness"—the land where nothing grows, the land never fertile. Water and the great ecological plan were changing that. There were places now on Arrakis where one could see the plush green velvet of forested hills. Forests on Arrakis! Some in the new generation found it difficult to imagine dunes beneath those undulant green hills. To such young eyes there was no shock value in seeing the flat foliage of rain trees. But Leto found himself thinking now in the Old Fremen manner, wary of change, fearful in the presence of the new.

He said: "The children tell me they seldom find sandtrout here near the surface anymore."

"What's that supposed to indicate?" Ghanima asked. There was petulance in her tone.

"Things are beginning to change very swiftly," he said.

Again, the bird chimed in the cliff, and night fell upon the desert as the hawk had fallen upon the partridge. Night often subjected him to an assault of memories—all of those inner lives clamoring for their moment. Ghanima didn't object to this phenomenon in quite the way he did. She knew his disquiet, though, and he felt her hand touch his shoulder in sympathy.

He struck an angry chord from

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the baliset. How could he tell her what was happening to him?

Within his head were wars, uncounted lives parceling out their ancient memories: violent accidents, love's languor, the colors of many places and many faces . . . the buried sorrows and leaping joys of multitudes. He heard elegies to springs on planets which no longer existed, green dances and firelight, wails and halloos, a harvest of conversations without number.

Their assault was hardest to bear at nightfall in the open.

"Shouldn't we be going in?" she asked.

He shook his head, and she felt the movement, realizing at last that his troubles went deeper than she had suspected.

Why do I so often greet the night out here? he asked himself. He did not feel Ghanima withdraw her hand.

"You know why you torment yourself this way," she said.

He heard the gentle chiding in her voice. Yes, he knew. The answer lay there in his awareness, obvious: *Because that great known-unknown within moved him like a wave.* He felt the cresting of his past as though he rode a surfboard. He had his father's time-spread memories of prescience superimposed upon everything else, yet he wanted all of those pasts. He wanted them. And they were so very dangerous. He knew that completely now with this new thing which he would have to tell Ghanima.

The desert was beginning to glow under the rising light of First Moon. He stared out at the false immobility of sand furls reaching into infinity. To his left, in the near distance, lay The Attendant, a rock outcropping which sandblast winds had reduced to a low, sinuous shape like a dark worm striking through the dunes. Someday, the rock beneath him would be cut down to such a shape and Sietch Tabr would be no more except in the memories of someone like himself. He did not doubt that there would be someone like himself.

"Why're you staring at The Attendant?" Ghanima asked.

He shrugged. In defiance of their guardians' orders, he and Ghanima often went to The Attendant. They had discovered a secret hiding place there, and Leto knew now why that place lured them.

Beneath him, its distance foreshortened by darkness, an open stretch of qanat gleamed in moonlight; its surface rippled with movements of predator fish which Fremen always planted in their stored water to keep out the sandtrout.

"I stand between fish and worm," he murmured.

"What?"

He repeated it louder.

She put a hand to her mouth, beginning to suspect the thing which moved him. Her father had acted thus: she had but to peer inward and compare.

Leto shuddered. Memories which fastened him to places his flesh had never known presented him with answers to questions he had not asked. He saw relationships and unfolding events against a gigantic

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inner screen. The sandworm of Dune would not cross water: water poisoned it. Yet, water had been known here in prehistoric times. White gypsum pans attested to bygone lakes and seas. Wells, deep-drilled, found water which sandtrout sealed off. As clearly as if he'd witnessed the events, he saw what had happened on this planet and it filled him with foreboding for the cataclysmic changes which human intervention was bringing about.

His voice barely above a whisper, he said: "I know what happened, Ghanima."

She bent close to him. "Yes?"

"The sandtrout . . ."

He fell silent and she wondered why he kept referring to the haploid phase of the planet's giant sandworm, but she dared not prod him.

"The sandworm," he repeated, "was introduced here from some other place. This was a wet planet then. They proliferated beyond the capability of existing ecosystems to deal with them. Sandtrout encysted the available free water, made this a desert planet . . . and they did it to survive. In a planet sufficiently dry, they could move to their sandworm phase."

"The sandtrout?" She shook her head, not doubting him, but unwilling to search those depths where he gathered such information. And she thought: *Sandtrout?* Many times in this flesh and other had she played the childhood game, poling for sandtrout, teasing them into a thin glove membrane before taking them to the deathstill for their water. It was difficult to think of this mindless little creature as a shaper of enormous events.

Leto nodded to himself. Fremen had always known to plant predator fish in their water cisterns. The haploid sandtrout actively resisted great accumulations of water near the planet's surface: predators swam in that qanat below him. Their sandworm vector could handle small amounts of water, the amounts held in cellular bondage by human flesh, for example. But confronted by large bodies of water, their chemical factories went wild, exploded in the death-transformation which produced the dangerous melange concentrate, the ultimate awareness drug employed in a diluted fraction for the sietch orgy. That pure concentrate had taken Paul Muad'Dib through the walls of Time, deep into the well of dissolution which no other male had ever dared.

Ghanima sensed her brother trembling where he sat in front of her. "What have you done?" she demanded.

But he would not leave his own train of revelation. "Fewer sandtrout—the ecological transformation of the planet . . ."

"They resist it, of course," she said, and now she began to understand the fear in his voice, drawn into this thing against her will.

"When the sandtrout go, so do all the worms," he said. "The tribes must be warned."

"No more spice," she said.

Words merely touched high points of the system danger which they both saw hanging over human

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intrusion into Dune's ancient relationships.

"It's the thing Alia knows," he said. "It's why she gloats."

"How can you be sure of that?"

"I'm sure."

Now, she knew for certain what disturbed him and she felt the knowledge chill her.

"The tribes won't believe us if she denies it," he said.

His statement went to the primary problem of their existence. What Fremen expected wisdom from a nine-year-old? Alia, growing farther and farther from her own inner sharing each day, played upon this.

"We must convince Stilgar," Ghanima said.

As one, their heads turned and they stared out over the moonlit desert. It was a different place now, changed by just a few moments of awareness. Human interplay with that environment had never been more apparent to them. They felt themselves as integral parts of a dynamic system held in delicately balanced order. The new outlook involved a real change of consciousness which flooded them with observations. As Liet Kynes had said, the universe was a place of constant conversation between animal populations. The haploid sandtrout had spoken to them as human animals.

"The tribes would understand a threat to water," Leto said.

"But it's a threat to more than water. It's a . . ." She fell silent, understanding the deeper meaning of his words. Water was the ultimate power symbol on Arrakis. Fremen remained at their roots special-application animals, desert survivors, governance experts under conditions of stress. And as water became plentiful, a strange symbol transfer came over them even while they understood the old necessities.

"You mean a threat to power," she corrected him.

"Of course."

"But will they believe us?"

"If they see it happening, if they see the imbalance."

"Balance," she said, and repeated her father's words from long ago: "It's what distinguishes a people from a mob."

Her words called up their father in him and he said: "Economics versus beauty . . . a story older than Sheba." He sighed, looked over his shoulder at her. "I'm beginning to have prescient dreams, Ghani."

A sharp gasp escaped her.

He said: "When Stilgar told us our grandmother was delayed—I already knew that moment. Now, my other dreams are suspect."

"Leto . . ." She shook her head, eyes damp. "It came later for our father. Don't you think it might be . . ."

"I've dreamed myself enclosed in armor and racing across the dunes," he said. "And I've been to Jacurutu."

"Jaca . . ." She cleared her throat. "That old myth!"

"A real place. Ghani! I must find this man they call The Preacher. I must find him and question him."

"You think he's . . . our father?"

"Ask yourself that question."

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"It'd be just like him," she agreed, "but . . ."

"I don't like the things I know I'll do," he said. "For the first time in my life I understand my father."

She felt excluded from his thoughts, said: "The Preacher's probably just an old mystic."

"I pray for that," he whispered. "Oh, how I pray for that." He rocked forward, got to his feet. The baliset hummed in his hand as he moved. "Would that he were only Gabriel without a horn." He stared silently at the moonlit desert.

She turned to look where he looked, saw the foxfire glow of rotting vegetation at the edge of the sietch plantings, then the clean blending into lines of dunes. That was a living place out there. Even when the desert slept, something remained awake in it. She sensed that wakefulness, hearing animals below her drinking at the qanat. Leto's revelation had transformed the night: this was a living moment, a time to discover regularities within perpetual change, an instant in which to feel that long movement from their Terranic past, all of it encapsulated in her memories.

"Why Jacurutu?" she asked and the flatness of her tone shattered the mood.

"Why . . . I don't know. When Stilgar first told us how they killed the people there and made the place taboo, I thought . . . what you thought. But danger comes from there now . . . and The Preacher."

She didn't respond, didn't demand that he share more of his prescient dreams with her, and she knew how much this told him of her terror. That way led to Abomination and they both knew it. The word hung unspoken between them as he turned and led the way back to the sietch entrance.

The Universe is God's. It is *one thing*, a wholeness against which all separations may be identified. Transient life, even that self-aware and reasoning life which we call sentient, holds only fragile trusteeship on any portion of the wholeness.

—Commentaries from the C.E.T.
(Commission of
Ecumenical Translators)

Halleck used hand signals to convey the actual message while speaking aloud of other matters. He didn't like the small anteroom the priests had assigned for this report, knowing it would be crawling with spy devices. Let them try to break the tiny hand signals, though. The Atreides had used this means of communication for centuries without anyone the wiser.

Night had fallen outside, but the room had no windows, depending upon glowglobes at the upper corners.

"Many of those we took were Alia's people," Halleck signaled, watching Jessica's face as he spoke aloud, telling her the interrogation still continued.

"It was as you anticipated then," Jessica replied, her fingers winking. She nodded and spoke an open reply: "I'll expect a full report when you're satisfied, Gurney."

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"Of course, My Lady," he said, and his fingers continued: "There is another thing, quite disturbing. Under the deep drugs, some of our captives talked of Jacurutu and, as they spoke the name, they died."

"A conditioned heart-stopper?" Jessica's fingers asked. And she said: "Have you released any of the captives?"

"A few, My Lady; the more obvious culls." And his fingers darted: "We suspect a heart-compulsion but are not yet certain. The autopsies aren't completed. I thought you should know about this thing of Jacurutu, however, and came immediately."

"My Duke and I always thought Jacurutu an interesting legend probably based on fact," Jessica's fingers said, and she ignored the usual tug of sorrow as she spoke of her long-dead love.

"Do you have others?" Halleck asked, speaking aloud.

Jessica answered in kind, telling him to return to the landing field and report when he had positive information, but her fingers conveyed another message: "Resume contact with your friends among the smugglers. If Jacurutu still exists, they'll surely support themselves by selling spice. There'd be no other market for them except the smugglers."

Halleck bowed his head briefly while his fingers said: "I've already set this course in motion, My Lady." And because he could not ignore the training of a lifetime, added: "Be very careful in this place. Alia is your enemy and most of the priesthood belongs to her."

"Not Javid," Jessica's fingers responded. "He hates the Atreides. I doubt anyone but an adept could detect it, but I'm positive of it. He conspires and Alia doesn't know of it."

"I'm assigning additional guards to your person," Halleck said, speaking aloud, avoiding the light spark of displeasure which Jessica's eyes betrayed. "There are dangers, I'm certain. Will you spend the night here?"

"We'll go later to Sietch Tabr," she said and hesitated, on the point of telling him not to send more guards, but she held her silence. Gurney's instincts were to be trusted. More than one Atreides had learned this, both to his pleasure and his sorrow. "I have one more meeting . . . with the Master of Novitiates this time," she said. "That's the last one and I'll be happily shut of this place."

And I beheld another beast coming up out of the sand; and he had two horns like a lamb, but his mouth was fanged and fiery as the dragon and his body shimmered and burned with great heat while it did hiss like the serpent.

—Revised Orange Catholic Bible

He called himself *The Preacher* and there had come to be an awesome fear among many on Arrakis that he might be Muad'Dib returned from the desert, not dead at all. Muad'Dib could be alive; for who had seen his body? For that matter, who saw any body that the desert took? But still—Muad'Dib? Points of comparison could be

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made, although no one from the old days came forward and said: "Yes, I see that this is Muad'Dib; I know him."

Still . . . like Muad'Dib, The Preacher was blind, his eye sockets black and scarred in a way that could have been done by a stone burner. And his voice conveyed that crackling penetration, that same compelling force which demanded a response from deep within you. Many remarked this. He was lean, this Preacher, his leathery face seamed, his hair grizzled. But the deep desert did that to many people. You had only to look about you and see this proven. And there was another fact for contention: The Preacher was led by a young Fremen, a lad without known sietch who said, when questioned, that he worked for hire. It was argued that Muad'Dib, knowing the future, had not needed such a guide except at the very end when his grief overcame him. But he'd needed a guide then; everyone knew it.

The Preacher had appeared one winter morning in the streets of Arrakeen, a brown and ridge-veined hand on the shouder of his young guide. The lad, who gave his name as Assan Tariq, moved through the flint-smelling dust of the early swarming, leading his charge with the practiced agility of the warren-born, never once losing contact.

It was observed that the blind man wore a traditional bourka over a stillsuit which bore the mark about it of those once made only in the sietch caves of the deepest desert. It wasn't like the shabby suits being turned out these days. The nose tube which captured moisture from his breath for the recycling layers beneath the bourka was wrapped in braid, and it was the black vine braid so seldom seen anymore. The suit's mask across the lower half of his face carried green patches etched by the blown sand. All in all, this Preacher was a figure from Dune's past.

Many among the early crowds of that winter day had noted his passage. After all, a blind Fremen remained a rarity. Fremen law still consigned the blind to Shai Hulud. The wording of the law, although it was less honored in these modern, water-soft times, remained unchanged from the earliest days. The blind were a gift to Shai Hulud. They were to be exposed in the open bled for the great worms to devour. When it was done—and there were stories which got back to the cities—it was always done out where the largest worms still ruled, those called Old Men of the Desert. A blind Fremen, then, was a curiosity and people watched the passing of this odd pair.

The lad appeared about fourteen standard, one of the new breed who wore modified stillsuits. It left the face open to the moisture-robbing air. He had slender features, the all-blue spice tinted eyes, a nubbin nose and that innocuous look of innocence which so often masks cynical knowledge in the young. In contrast, the blind man was a reminder of times almost forgotten—long in stride and with a wiriness that spoke of many years on the sand with only his feet or a

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captive worm to carry him. He held his head in that stiff-necked rigidity which some of the blind cannot put off. The hooded head moved only when he cocked an ear at an interesting sound.

Through the day's gathering crowds the strange pair came, arriving at last on the steps which led up like terraced hectares to the escarpment which was Alia's Cathedral, a fitting companion to Paul's Keep. Up the steps the Preacher went until he and his young guide came to the third landing where pilgrims of the Hajj awaited the morning opening of those gigantic doors above them. They were doors large enough to have admitted an entire cathedral from one of the ancient religions. Passing through them was said to reduce a pilgrim's soul to *motedom*, sufficiently small that it could pass through the eye of a needle and enter heaven.

At the edge of the third landing, The Preacher turned and it was as though he looked about him, seeing with his empty eye sockets the foppish city dwellers, some of them Fremen, with garments which simulated stillsuits but were only decorative fabrics, *seeing* the eager pilgrims fresh off the Guild space transports and awaiting that first step on the devotion which would ensure them a place in paradise.

The landing was a noisy place: there were Mahdi Spirit Cultists in green robes and carrying live hawks trained to screech a "call to heaven." Food was being sold by shouting vendors. Many things were being offered for sale, the voices shouting in competitive stridence: there was the Dune Tarot with its booklets of commentaries imprinted on shigawire. One vendor had exotic bits of cloth "guaranteed to have been touched by Muad'Dib himself!" Another had vials of water "certified to have come from Sietch Tabr where Muad'Dib lived." Through it all there were conversations in a hundred or more dialects of Galach interspersed with harsh gutturals and squeaks of *outrine* languages which were gathered under the Holy Imperium. Face Dancers and little people from the suspected artisan planets of the Tleilaxu bounced and gyrated through the throng in bright clothing. There were lean faces and fat, water-rich faces. The susurration of nervous feet came from the gritty plasteel which formed the wide steps. And occasionally, a keening voice would rise out of the cacophony in prayer—"Mua-a-a-ad'Dib! Mua-a-a-ad'Dib! Greet my soul's entreaty! You, who are God's anointed, greet my soul! Mua-a-a-ad'Dib!"

Nearby among the pilgrims, two mummers played for a few coins, reciting the lines of the currently popular "Disputation of Armistead and Leandgrah."

The Preacher cocked his head to listen.

The mummers were middle-aged city men with bored voices. At a word of command, the young guide described them for The Preacher. They were garbed in loose robes, not even deigning to simulate stillsuits on their water-rich bodies. Assan Tariq thought this amusing, but The Preacher reprimanded him.

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The mummer who played the part of Leandgrah was just concluding his oration: "Bah! The universe can be grasped only by the sentient hand. That hand is what drives your precious brain and it drives everything else that derives from the brain. You see what you have created, you *become* sentient, only after the hand has done its work!"

A scattering of applause greeted his performance.

The Preacher sniffed and his nostrils recorded the rich odors of this place: uncapped esters of poorly adjusted stillsuits, masking musks of diverse origin, the common flinty dust, exhalations of uncounted exotic diets and the aromas of rare incense which already had been ignited within Alia's Cathedral and now drifted down over the steps in cleverly directed currents. The Preacher's thoughts were mirrored on his face as he absorbed his surroundings: *We have come to this, we Fremen!*

A sudden diversion rippled through the crowd on the landing. Sand dancers had come into the plaza at the foot of the steps, half a hundred of them tethered to each other by elacca ropes. They obviously had been dancing thus for days, seeking a state of ecstasy. Foam dribbled from their mouths as they jerked and stamped to their secret music. A full third of them dangled unconscious from the ropes, tugged back and forth by the others like dolls on strings. One of these dolls had come awake, though, and the crowd apparently knew what to expect.

"I have see-ee-een!" the newly awakened dancer shrieked. "I have see-ee-een!" He resisted the pull of the other dancers, darted his wild gaze right and left. "Where this city is, there will be only sand! I have see-ee-een!"

A great swelling laugh went up from the onlookers. Even the new pilgrims joined it.

This was too much for The Preacher. He raised both arms and roared in a voice which surely had commanded worm riders: "Silence!"

The entire throng in the plaza went still at that battle cry.

The Preacher pointed a thin hand toward the dancers and the illusion that he actually saw them was uncanny. "Did you not hear that man? Blasphemers and idolaters! All of you! The religion of Muad'Dib is not Muad'Dib. He spurns it as he spurns you! Sand will cover this place. Sand will cover you."

Saying this, he dropped his arms, put a hand on his young guide's shoulder and commanded: "Take me from this place."

Perhaps it was The Preacher's choice of words: "He spurns it as he spurns you!" Perhaps it was his tone, certainly something more than human, a vocality trained surely in the arts of the Bene Gesserit Voice which commanded by mere nuances of subtle inflection. Perhaps it was only the inherent mysticism of this place where Muad'Dib had lived and walked and ruled. Someone called out from the landing, shouting at The Preacher's receding back in a voice

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which trembled with religious awe: "Is that Muad'Dib come back to us?"

The Preacher stopped, reached into the purse beneath his bourka and removed an object which only those nearby recognized. It was a desert-mummified human hand, one of the planet's jokes on mortality which occasionally turned up in the sand and were universally regarded as communications from Shai Hulud. The hand had been desiccated into a tight fist which ended in white bone scarred by sandblast winds.

"I bring the Hand of God and that is all I bring!" The Preacher shouted. "I speak for the Hand of God. I am The Preacher."

Some took him to mean that the hand was Muad'Dib's, but others fastened on that commanding presence and the terrible voice. And that was how Arrakis came to know his name, but it was not the last time his voice was heard.

It is commonly reported, my dear Georad, that there exists great natural virtue in the melange experience. Perhaps this is true. There remain within me, however, profound doubts that every use of melange always brings virtue. Meseems that certain persons have corrupted the use of melange in defiance of God. In the words of the Ecumenon, they have disfigured the soul. They skim the surface of melange and believe thereby to attain grace. They deride their fellows, do great harm to godliness and they distort the meaning of this abundant gift maliciously, surely a mutilation beyond the power of man to restore. To be truly at one with the virtue of the spice, uncorrupted in all ways, full of goodly honor, a man must permit his deeds and his words to agree. When your actions describe a system of evil consequences, you should be judged by those consequences and not by your explanations. It is thus that we should judge Muad'Dib.

—The Pedant Heresy

It was a small room tinged with the odor of ozone and reduced to a shadowy grayness by dimmed glowglobes and the metallic blue light of a single transeye monitoring screen. The screen was about a meter wide and only two-thirds of a meter in height. It revealed in remote detail a barren, rocky valley with two Laza tigers feeding on the bloody remnants of a recent kill. On the hillside above the tigers could be seen a slender man in Sardaukar working uniform, Levenbrech insignia at his collar. He wore a servo-control keyboard against his chest.

One veriform suspensor chair faced the screen, occupied by a fair-haired woman of indeterminate age. She had a heart-shaped face and slender hands which gripped the chair arms as she watched. The fullness of a white robe trimmed in gold concealed her figure. A pace to her right stood a blocky man dressed in the bronze and gold uniform of a Bashar Aide in the old Imperial Sardaukar. His graying hair had been closely cropped over square, emotionless features.

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The woman coughed, said: "It went as you predicted, Tyekanik."

"Assuredly, Princess," the Bashar Aide said, his voice hoarse.

She smiled at the tension in his voice, asked: "Tell me, Tyekanik, how will my son like the sound of Emperor Farad'n I?"

"The title suits him, Princess."

"That was not my question."

"He might not approve some of the things done to gain him that, ahh, title."

"Then again . . ." She turned, peered up through the gloom at him. "You served my father well. It was not your fault that he lost the throne to the Atreides. But surely the sting of that loss must be felt as keenly by you as by any . . ."

"Does the Princess Wensicia have some special task for me?" Tyekanik asked. His voice remained hoarse, but there was a sharp edge to it now.

"You have a bad habit of interrupting me," she said.

Now, he smiled, displaying thick teeth which glistened in the light from the screen. "At times, you remind me of your father," he said. "Always these circumlocutions before a request for a delicate . . . ahh, assignment."

She jerked her gaze away from him to conceal anger, asked: "Do you really think those Lazas will put my son on the throne?"

"It's distinctly possible, Princess. You must admit that the bastard get of Paul Atreides would be no more than juicy morsels for those two. And with them gone . . ." He shrugged.

"The grandson of Shaddam IV becomes the logical successor," she said. "That is if we can remove the objections of the Fremen, the Landsraad and CHOAM, not to mention any surviving Atreides who might . . ."

"Javid assures me that his people can take care of Alia quite easily. I do not count the Lady Jessica as an Atreides. Who else remains?"

"Landsraad and CHOAM will go where the profit goes," she said, "but what of the Fremen?"

"We'll drown them in their Muad'Dib's religion!"

"Easier said than done, my dear Tyekanik."

"I see," he said. "We're back to that old argument."

"House Corrino has done worse things to gain power," she said.

"But to embrace this . . . this Mahdi's religion!"

"My son respects you," she said.

"Princess, I long for the day when House Corrino returns to its rightful seat of power. So does every remaining Sardaukar here on Salusa, but if you . . ."

"Tyekanik! This is the planet Salusa *Secundus*. Do not fall into the lazy ways which spread through our Imperium. Full name, complete title—attention to every detail. Those attributes will send the Atreides lifeblood into the sands of Arrakis. Every detail, Tyekanik!"

He knew what she was doing with this attack. It was part of the shifty trickiness she'd learned from her sister, Irulan. But he felt himself losing ground.

"Do you hear me, Tyekanik?"

"I hear, Princess."

"I want you to embrace this

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Muad'Dib religion," she said.

"Princess, I would walk into fire for you, but this . . ."

"That is an order, Tyekanik!"

He swallowed, stared into the screen. The Laza tigers had finished feeding and now lay on the sand completing their toilet, long tongues moving across their forepaws.

"An *order*, Tyekanik—do you understand me?"

"I hear and obey, Princess." His voice did not change tone.

She signed. "Ohh, if my father were only alive . . ."

"Yes, Princess."

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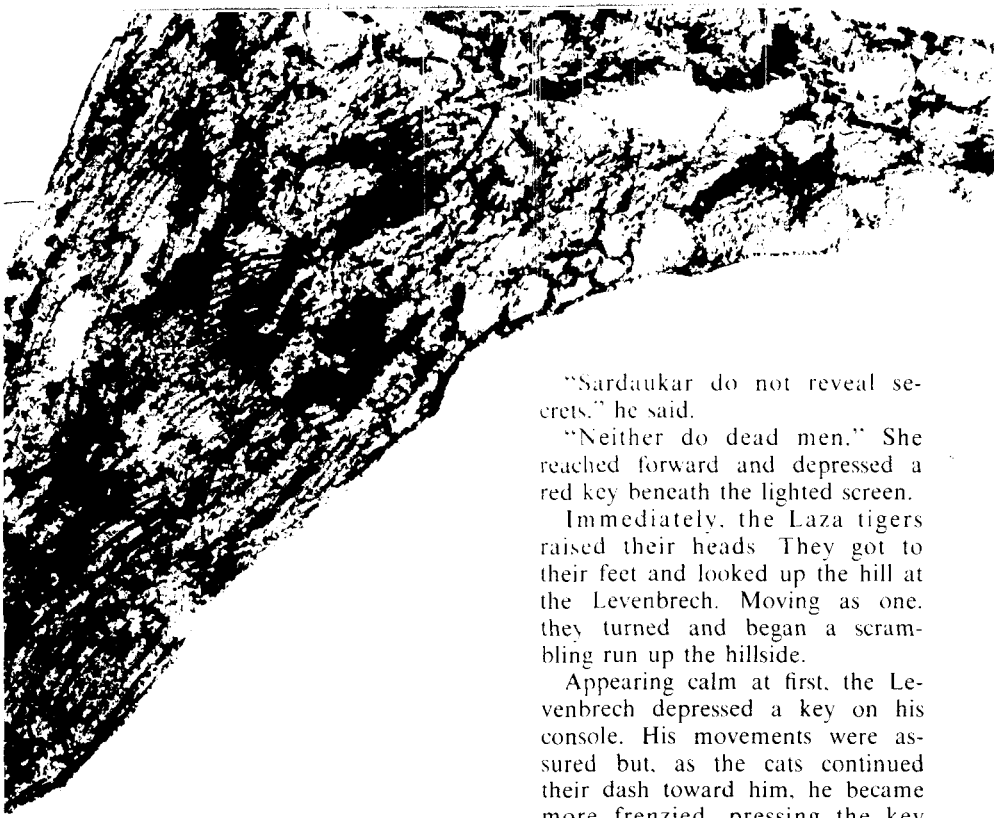

"Don't mock me, Tyekanik. I know how distasteful this is to you. But if you set the example . . ."

"He may not follow, Princess."

"He'll follow." She pointed at the screen. "It occurs to me that the Levenbrech out there could be a problem."

"A problem? How is that?"

"How many people know this thing of the tigers?"

"That Levenbrech who is their trainer . . . one transport pilot, you and, of course . . ." He tapped his own chest.

"What about the buyers?"

"They know nothing. What is it you fear, Princess?"

"My son is, well, sensitive."

"Sardaukar do not reveal secrets," he said.

"Neither do dead men." She reached forward and depressed a red key beneath the lighted screen.

Immediately, the Laza tigers raised their heads. They got to their feet and looked up the hill at the Levenbrech. Moving as one, they turned and began a scrambling run up the hillside.

Appearing calm at first, the Levenbrech depressed a key on his console. His movements were assured but, as the cats continued their dash toward him, he became more frenzied, pressing the key harder and harder. A look of startled awareness came over his features and his hand jerked toward the working knife at his waist. The movement came too late. A raking claw hit his chest and sent him sprawling. As he fell, the other tiger took his neck in one great-fanged bite, shook him and his spine snapped.

"Attention to detail," the Princess said. She turned, stiffened as Tyekanik drew his knife. But he presented the blade to her, handle foremost.

"Perhaps you'd like to use my knife to attend to another detail," he said.

"Put that back in its sheath and don't act the fool!" she ranted.

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"Sometimes, Tyekanik you try me to the . . ."

"That was a good man out there, Princess. One of my best."

"One of *my* best," she corrected him.

He drew a deep, trembling breath, sheathed his knife. "And what of my transport pilot?"

"This will be ascribed to an accident," she said. "You will advise him to employ the utmost caution when he brings those tigers back to us. And, of course, when he has delivered our pets to Javid's people on the transport . . ." She looked at his knife.

"Is that an order, Princess?"

"It is."

"Shall I, then, fall on my knife or will you take care of that, ahhh, detail?"

She spoke with a false calm, her voice heavy: "Tyekanik, if I were not absolutely convinced that you *would* fall on your knife at my command, you would not be standing here beside me . . . armed."

He swallowed, stared at the screen. The tigers once more were feeding.

She refused to look at the scene, continued to stare at Tyekanik as she said: "You will, as well, tell our buyers not to bring us any more matched pairs of children who fit the necessary description."

"As you command, Princess."

"Don't use that tone with me, Tyekanik."

"Yes, Princess."

Her lips drew into a straight line, then: "How many more of those paired costumes do we have?"

"Six sets of the robes, complete with stillsuits and the sand shoes, all with the Atreides insignia worked into them."

"Fabrics as rich as the ones on that pair?" She nodded toward the screen.

"Fit for royalty, Princess."

"Attention to detail," she said. "The garments will be dispatched to Arrakis as gifts for our royal cousins. They will be gifts from my son, do you understand me, Tyekanik?"

"Completely, Princess."

"Have him inscribe a suitable note. It should say that he sends these few paltry garments as tokens of his devotion to House Atreides. Something on that order."

"And the occasion?"

"There must be a birthday or holy day or something, Tyekanik. I leave that to you. I trust you, my friend."

He stared at her silently.

Her face hardened. "Surely, you must know that! Who else can I trust since the death of my husband?"

He shrugged, thinking how closely she emulated the spider. It would not do to get on intimate terms with her as he now suspected his Levenbrech had done.

"And Tyekanik," she said, "one more detail."

"Yes, Princess."

"My son is being trained to rule. There will come a time when he must grasp the sword in his own hands. You will know when that moment arrives. I'll wish to be informed immediately."

"As you command, Princess."

She leaned back, peered

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knowingly at Tyekanik. "You do not approve of me, I know that. It is unimportant to me as long as you remember the lesson of the Levenbrech."

"He was very good with animals, but disposable: yes, Princess."

"That is not what I mean!"

"It isn't? Then . . . I don't understand."

"An army," she said, "is composed of disposable, completely replaceable parts. That is the lesson of the Levenbrech."

"Replaceable parts," he said. "Including the supreme command?"

"Without the supreme command, there is seldom a reason for an army, Tyekanik. That is why you will immediately embrace this Mahdi religion and, at the same time, begin the campaign to convert my son."

"At once, Princess. I presume you don't want me to stint his education in the other martial arts at the expense of this, ahh, religion?"

She pushed herself out of the chair, strode around him, paused at the door and spoke without looking back. "Someday you will try my patience once too often, Tyekanik." With that, she let herself out.

Either we abandon the long-honored Theory of Relativity, or we cease to believe that we can engage in continued accurate prediction of *the* future. Indeed, knowing *the* future raises a host of questions which cannot be answered under conventional assumptions unless one first projects an Observer outside of Time and, second, nullifies *all* movement. If you accept the Theory of Relativity, it can be show that Time and the Observer must stand still in relationship to each other or inaccuracies will intervene. This would seem to say that it is impossible to engage in accurate prediction of the future. How, then, do we explain the continued seeking after this visionary goal by respected scientists? How, then, do we explain Muad'Dib?

—Lectures on Prescience
by Harq al Ada

"I must tell you something," Jessica said, "even though I know my telling will remind you of many experiences from our mutual past and that this will place you in jeopardy."

She paused to see how Ghanima was taking this.

They sat alone, just the two of them, occupying low cushions in a chamber of Sietch Tabr. It had required considerable skill to maneuver this meeting and Jessica was not at all certain that she had been alone in the maneuvering. Ghanima had seemed to anticipate and augment every step.

It was almost two hours after daylight and the excitements of greeting and all of the recognitions were past. Jessica forced her pulse back to a steady pace and focused her attention into this rock-walled room with its dark hangings and yellow cushions. To meet the accumulated tensions, she found herself for the first time in years recalling the Litany Against Fear from the Bene Gesserit rite.

"*I must not fear. Fear is the*

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mind-killer. Fear is the little-death that brings total obliteration. I will face my fear. I will permit it to pass over me and through me. And when it has gone past I will turn the inner eye to see its path. Where the fear has gone there will be nothing. Only I will remain."

She did this silently and took a deep, calming breath.

"It helps at times," Ghanima said. "The Litany, I mean."

Jessica closed her eyes to hide the shock of this insight. It had been a long time since anyone had been able to read her that intimately. The realization was disconcerting, especially when it was ignited by an intellect which hid behind a mask of childhood.

Having faced her fear, though, Jessica opened her eyes and knew the source of turmoil: *I fear for my grandchildren.* Neither of these children betrayed the stigmata of Abomination which Alia flaunted, although Leto showed every sign of some terrifying concealment. It was for that reason he'd been deftly excluded from this meeting.

On impulse, Jessica put aside her ingrained emotional masks, knowing them to be of little use here, barriers to communication. Not since those loving moments with her Duke had she lowered these barriers and she found the action both relief and pain. There remained facts which no curse or prayer or litany could wash from existence. Flight would not leave such facts behind. They could not be ignored. Elements of Paul's vision had been re-arranged and the times had caught up with his children. They were a magnet in the void; evil and all the sad misuses of power collected around them.

Ghanima, watching the play of emotions across her grandmother's face, marveled that Jessica had let down her controls.

With catching movements of their heads remarkably synchronized, both turned, eyes met and they stared deeply, probingly at each other. Thoughts without spoken words passed between them.

Jessica: *I wish you to see my fear.*

Ghanima: *Now, I know you love me.*

It was a swift moment of utter trust.

Jessica said: "When your father was but a boy, I brought a Reverend Mother to Caladan to test him."

Ghanima nodded. The memory of it was extremely vivid.

"We Bene Gesserits were always cautious to make sure that the children we raised were human and not animal. One cannot always tell by exterior appearances."

"It's the way you were trained," Ghanima said, and the memory flooded into her mind: that old Bene Gesserit, Gaius Helen Mohiam. She'd come to Castle Caladan with her poisoned Gom Jabbar and her box of burning pain. Paul's hand (Ghanima's own hand in the shared memory) screamed with the agony of that box while the old woman talked calmly of immediate death if the hand were withdrawn from the pain. And there had been no doubt of the death in that needle held ready against the

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child's neck while the aged voice droned its rationale:

"*You've heard of animals chewing off a leg to escape a trap. There's an animal kind of trick. A human would remain in the trap, endure the pain, feigning death that he might kill the trapper and remove a threat to his kind.*"

Ghanima shook her head against the remembered pain. The burning! The burning! Paul had imagined his skin curling black on that agonized hand within the box, flesh crisping and dropping away until only charred bones remained. And it had been a trick—the hand unharmed. But sweat stood out on Ghanima's forehead at the memory.

"Of course you remember this in a way that I cannot," Jessica said.

For a moment, memory-driven, Ghanima saw her grandmother in a different light: what this woman might do out of the driving necessities of that early conditioning in the Bene Gesserit schools! It raised new questions about Jessica's return to Arrakis.

"It would be stupid to repeat such a test on you or your brother," Jessica said. "You already know the way it went. I must assume you are human, that you will not misuse your inherited powers."

"But you don't make that assumption at all," Ghanima said.

Jessica blinked, realized that the barriers had been creeping back in place, dropped them once more. She asked: "Will you believe my love for you?"

"Yes." Ghanima raised a hand as Jessica started to speak. "But that love wouldn't stop you from destroying us. Oh, I know the reasoning: 'Better the animal-human die than it recreate itself.' And that's especially true if the animal-human bears the name Atreides."

"You at least are human," Jessica blurted. "I trust my instinct on this."

Ghanima saw the truth in this, said: "But you're not sure of Leto."

"I'm not."

"Abomination?"

Jessica could only nod.

Ghanima said: "Not yet, at least. We both know the danger of it, though. We can see the way of it in Alia."

Jessica cupped her hands over her eyes, thought: *Even love can't protect us from unwanted facts.* And she knew then that she still loved her daughter, crying out silently against fate: *Alia! Oh, Alia! I am sorry for my part in your destruction.*

Ghanima cleared her throat loudly.

Jessica lowered her hands, thought: *I may mourn my poor daughter but there are other necessities now.*

She said: "So you've recognized what happened to Alia."

"Leto and I watched it happen. We were powerless to prevent it, although we discussed many possibilities."

"You're sure that your brother is free of this curse?"

"I'm sure."

The quiet assurance in that statement could not be denied. Jessica found herself accepting it, then: "How is it you've escaped?"

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Ghanima explained the spice-trance theory upon which she and Leto had settled, went on to reveal his dreams and the plans they'd discussed . . . even Jacurutu.

Jessica nodded. "Reasonable. It fits the known facts. Alia is an Atreides, though, and that poses enormous problems."

Ghanima fell silent before the sudden realization that Jessica still mourned her Duke as though his death had been but yesterday, that she would guard his name and memory against all threats. Personal memories from the Duke's own lifetime fled through Ghanima's awareness to reinforce this assessment, to soften it with understanding.

"Now," Jessica said, voice brisk, "what about this Preacher? I heard some disquieting reports yesterday after that damnable *Lustration*."

Ghanima shrugged. "He could be . . ."

"Paul?"

"Yes, but we haven't seen him to examine."

"Javid laughs at the rumors," Jessica said.

Ghanima hesitated, then: "Do you trust this Javid?"

A grim smile touched Jessica's lips. "No more than you do."

"Leto says Javid laughs at the wrong things," Ghanima said.

"So much for Javid's laughter," Jessica said. "But do you actually entertain the notion that my son is still alive, that he has returned in this guise?"

"We say it's possible. And Leto . . ." Ghanima found her mouth suddenly dry, remembered fears clutching her breast. She forced herself to overcome them, recounted Leto's other revelations of prescient dreams.

Jessica moved her head from side to side as though wounded.

Ghanima said: "Leto says he must find this Preacher and make sure."

"Yes . . . of course. I should never have left here. It was cowardly of me."

"Why do you blame yourself? You had reached a limit. I know that. Leto knows it. Even Alia may know it."

Jessica put a hand to her own throat, rubbed it briefly, then: "Yes, the problem of Alia."

"She works a strange attraction on Leto," Ghanima said. "That's why I helped you meet alone with me. He agrees that she is beyond hope, but still he finds ways to be with her and . . . study her. And . . . it's very disturbing. When I try to talk against this, he falls asleep. He . . ."

"Is she drugging him?"

"No-o-o," Ghanima shook her head. "But he has this odd empathy for her. And . . . in his sleep, he often mutters *Jacurutu*."

"That again!" And Jessica found herself recounting Gurney's report about the conspirators exposed at the landing field.

"I sometimes fear Alia wants Leto to seek out Jacurutu," Ghanima said. "And I always thought it only a legend. You know it, of course."

Jessica shuddered. "Terrible story. Terrible."

"What must we do?" Ghanima

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asked. "I fear to search all of my memories, all of my lives . . ."

"Ghani! I warn you against that. You mustn't risk . . ."

"It may happen even if I don't risk it. How do we know what really happened to Alia? But for Leto's sake . . ."

"No. You could be spared that . . . that *possession*." She ground the word out. "Well . . . Jacurutu, is it? I've sent Gurney to find the place . . . if it exists."

"But how can he . . . Oh! Of course: the smugglers."

Jessica found herself silenced by this further example of how Ghanima's mind worked in concert with what must be an inner awareness of others. *Of me!* How truly strange it was, Jessica thought, that this young flesh could carry all of Paul's memories, at least until the moment of Paul's spermal separation from his own past. It was an invasion of privacy against which something primal in Jessica rebelled. Momentarily, she felt herself sinking into the absolute and unswerving Bene Gesserit judgment: *Abomination!* But there was a sweetness about this child, a willingness to sacrifice for her brother, which could not be denied.

We are one life reaching out into a dark future, Jessica thought. *We are one blood.* And she girded herself to accept the events which she and Gurney Halleck had set in motion. Leto must be separated from his sister, must be trained as the Sisterhood insisted.

I hear the wind blowing across the desert and I see the moons of a winter night rising like great ships in the void. To them I make my vow: I will be resolute and make an art of government; I will balance my inherited past and become a perfect storehouse of my relic memories. And I will be known for kindliness more than for knowledge. My face will shine down the corridors of time for as long as humans exist.

—Leto's Vow
After Harq al-Ada

When she had been quite young, Alia Atreides had practiced for hours in the prana-bindu trance, trying to strengthen her own private personality against the onslaught of *all of those others.* She knew the problem—melange could not be escaped in a sietch warren. It infested everything: food, water, air, even the fabrics against which she cried at night. Very early, she recognized the uses of the sietch orgy where the tribe drank the death-water of a worm. In the orgy, Fremen released the accumulated pressures of their own genetic memories, and they denied those memories. She saw her companions temporarily possessed in the orgy.

For her, there was no such release, no denial. She had possessed full consciousness long before birth. With that consciousness came a cataclysmic awareness of her circumstances: womb-locked into intense, inescapable contact with the personas of all her ancestors and of those identities death-transmitted in spice-tau to the Lady Jessica. Before birth, Alia contained every bit of the knowledge required in a

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Bene Gesserit Reverend Mother plus much, much more from *all those others.*

In that knowledge lay recognition of a terrible reality—Abomination. The totality of that knowledge weakened her. The pre-born did not escape. Still, she fought against the more terrifying of her ancestors, winning for a time a Pyrrhic victory which had lasted through childhood. She'd known a private personality, but it had no immunity from the casual intrusions from those who lived their reflected lives through her.

Thus will I be one day, she thought. This thought chilled her. To walk and dissemble through the life of a child from her own loins, intruding, grasping at consciousness to add a quantum of experience.

Fear stalked her childhood. It persisted into puberty. She had fought it, never asking for help. Who would understand the help she required? Not her mother, who could never quite drive away that specter of Bene Gesserit judgment: the pre-born were Abomination.

There had come that night when her brother walked alone into the desert seeking death, giving himself to Shai Hulud as blind Fremen were supposed to do. Within the month, Alia had been married to Paul's swordmaster, Duncan Idaho, a mentat brought back from the dead by the arts of the Tleilaxu. Her mother fled back to Caladan. Paul's twins were her legal charge.

And she controlled the Regency.

Pressures of responsibility had driven the old fears away and she had been wide open to the inner lives, demanding their advice, plunging into spice-trance in search of guiding visions.

The crisis came on a day like many others in the spring month of Laab, a clear morning at Muad'Dib's Keep with a cold wind blowing down from the pole. Alia still wore the yellow for mourning, the color of the sterile sun. More and more these past few weeks, she'd been denying the inner voice of her mother who tended to sneer at preparation for the coming Holy Days to be centered on the Cathedral.

The inner-awareness of Jessica faded, faded . . . sinking away at last with a faceless demand that Alia would be better occupied working on the Atreides Law. New lives began to clamor for their moment of consciousness. Alia felt that she had opened a bottomless pit and faces arose out of it like a swarm of locusts until she came at last to focus on one who was like a beast: the old Baron Harkonnen. In terrified outrage, she had screamed out against all of that inner clamor, winning a temporary silence.

On this morning, Alia took her prebreakfast walk through the Keep's roof garden. In a new attempt to win the inner battle, she tried to hold her entire awareness within Choda's admonition to the Zensunni:

"*Leaving the ladder, one may fall upward!*"

But morning's glow along the cliffs of the Shield Wall kept distracting her. Plantings of resilient fuzz-grass filled the garden's pathways. When she looked away from

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the Shield Wall, she saw dew on the grass, the catch of all the moisture which had passed here in the night. It reflected her own passage as of a multitude.

That multitude made her giddy. Each reflection carried the imprint of a face from the inner multitude.

She tried to focus her mind onto what the grass implied. The presence of plentiful dew told her how far the Ecological Transformation had progressed on Arrakis. The climate of these northern latitudes was growing warmer; atmospheric carbon dioxide was on the increase. She reminded herself how many new hectares would be put under green plants in the coming year—and it required thirty-seven thousand cubic feet of water to irrigate just one hectare.

Despite every attempt at mundane thoughts, she could not drive away the sharklike circling of all those others within her.

She put her hands to her forehead and pressed.

Her temple guards had brought her a prisoner to judge at sunset the previous day: one Essas Paymon, a dark little man ostensibly in the pay of a house minor, the Nebiros, who traded in holy artifacts and small manufactured items for decoration. Actually, Paymon was known to be a CHOAM spy whose task was to assess the yearly spice crop. Alia had been on the point of sending him into the dungeons when he'd protested loudly "the injustice of the Atreides." That could have brought him an immediate sentence of death on the hanging tripod, but Alia had been caught by his boldness. She'd spoken sternly from her Throne of Judgment, trying to frighten him into revealing more than he'd already told her inquisitors.

"Why are our spice crops of such interest to the Combine Honnete?" she'd demanded. "Tell us and we may spare you."

"I only collect something for which there is a market," Paymon said. "I know nothing of what is done with my harvest."

"And for this petty profit you interfere with our royal plans?" Alia demanded.

"Royalty never considers that we might have plans, too," he countered.

Alia, captivated by his desperate audacity, said: "Essas Paymon, will you work for me?"

At this, a grin whitened his dark face, and he said: "You were about to obliterate me without a qualm. What is my new value that you should suddenly make a market for it?"

"You've a simple and practical value," she said. "You're bold and you're for hire to the highest bidder. I can bid higher than any other in the Empire."

At which, he named a remarkable sum which he required for his services, but Alia laughed and countered with a figure she considered more reasonable and undoubtedly far more than he'd ever before received. She added: "And, of course, I throw in the gift of your life upon which, I presume, you place an even more inordinate value."

"A bargain!" Paymon cried and,

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at a signal from Alia, was led away by her priestly Master of Appointments, Ziarenko Javid.

Less than an hour later, as Alia prepared to leave the Judgment Hall, Javid came hurrying to report that Paymon had been overheard to mutter the fateful lines from the Orange Catholic Bible: "*Maleficos non patieris vivere.*"

"Thou shalt not suffer a witch to live," Alia translated. So that was his gratitude! He was one of those who plotted against her very life! In a flush of rage such as she'd never before experienced, she ordered Paymon's immediate execution, sending his body to the Cathedral Deathstill where his water, at least, would be of some value in the priestly coffers.

And all night long, Paymon's dark face haunted her.

She tried all of her tricks against this persistent, accusing image, reciting the Bu Ji from the Fremen Book of Kreos: "Nothing occurs! Nothing occurs!" But Paymon took her through a wearing night into this giddy new day where she could see that his face had joined those in the jeweled reflections from the dew.

A female guard called her to breakfast from the roof door behind a low hedge of mimosa. Alia sighed. She felt small choice between hells: the outcry within her mind or the outcry from her attendants—all were pointless voices, but persistent in their demands, hourglass noises that she would like to silence with the edge of a knife.

Ignoring the guard, Alia stared across the roof garden toward the Shield Wall. A bahada had left its broad outwash like a detrital fan upon the sheltered floor of her domain. The delta of sand spread out before her gaze, outlined by the morning sun. It came to her that an uninitiated eye might see that broad fan as evidence of a river's flow, but it was no more than the place where her brother had shattered the Shield Wall with the Atreides Family Atomics, opening a path from the desert for the sandworms which had carried his Fremen troops to shocking victory over his imperial predecessor, Shaddam IV. Now, a broad qanat flowed with water on the Shield Wall's far side to block off sandworm intrusions. Sandworms would not cross open water; it poisoned them.

Would that I had such a barrier within my mind, she thought.

The thought increased her giddy sensation of being separated from reality. *Sandworms! Sandworms!*

Her memory presented a collection of sandworm images: mighty Shai-Hulud, the demi-urge of the Fremen, deadly beast of the desert's depths whose outpourings included the priceless spice. How odd it was, this sandworm, to grow from a flat and leathery sandtrout, she thought. They were like the flocking multitude within her awareness. The sandtrout, when linked edge to edge against the planet's bedrock, formed living cisterns; they held back the water that their sandworm vector might live. Alia could feel the analogy: some of *those others* within her mind held back dangerous forces which could destroy her.

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Again, the guard called her to breakfast, a note of impatience apparent.

Angrily, Alia turned, waved a dismissal signal. The guard obeyed, but the roof door slammed.

At the sound of the slamming door, Alia felt herself caught by everything she had attempted to deny. The other lives welled up within her like a hideous tide. Each demanding life pressed its face against her vision centers–a cloud of faces. Some presented mange-spotted skin, others were callous and full of sooty shadows; there were mouths like moist lozenges. The pressure of the swarm washed over her in a current which demanded that she float free and plunge into them.

"No," she whispered. "No . . . no . . . no . . ."

She would have collapsed onto the path but for a bench beside her which accepted her sagging body. She tried to sit, could not, stretched out on the cold plasteel, still whispering denial.

The tide continued to rise within her.

She felt attuned to the slightest show of attention, aware of the risk, but alert for every exclamation from those guarded mouths which clamored within her. They were a cacophony of demand for her attention: "*Me! Me!*" "*No, me!*" And she knew if she once gave her attention, gave it completely, she would be lost. To behold one face out of the multitude and follow the voice of that face would be to be held by that ego-centrism which shared her existence.

"Prescience does this to you," a voice whispered.

She covered her ears with her hands, thinking: *I'm not prescient! The trance doesn't work for me!*

But the voice persisted: "*It might work, if you had help.*"

"No . . . no," she whispered.

Other voices wove around her mind: "I, Agamemnon, your ancestor, demand audience!"

"No . . . no." She pressed her hands against her ears until the flesh answered her with pain.

An insane cackle within her head asked: "What has become of Ovid? Simple. He's John Bartlett's ibid!"

The names were meaningless in her extremity. She wanted to scream against them and against all the other voices, but could not find her own voice.

Her guard, sent back to the roof by senior attendants, peered once more from the doorway behind the mimosa, saw Alia on the bench, spoke to a companion: "Ahhh, she is resting. You noted that she didn't sleep well last night. It is good for her to take the *zaha*, the morning siesta."

Alia did not hear her guard. Her awareness was caught by shrieks of singing: "Merry old birds are we, hurrah!" The voices echoed against the inside of her skull and she thought: *I'm going insane. I'm losing my mind.*

Her feet made feeble fleeing motions against the bench. She felt that if she could only command her body to run, she might escape. She had to escape lest any part of that inner tide sweep her into silence, forever contaminating her

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soul. But her body would not obey. The mightiest forces in the Imperial universe would obey her slightest whim, but her body would not.

An inner voice chuckled, then: "From one viewpoint, child, each incident of creation represents a catastrophe." It was a basso voice which rumbled against her eyes, and again that chuckle as though deriding its own pontification. "My dear child, I will help you, but you must help me in return."

Against the swelling background clamor behind that basso voice, Alia spoke through chattering teeth: "Who . . . who . . ."

A face formed itself upon her awareness. It was a smiling face of such fatness that it could have been a baby's except for the glittering eagerness of the eyes. She tried to pull back, but achieved only a longer view which included the body attached to that face. The body was grossly, immensely fat, clothed in a robe which revealed by subtle bulges beneath it that this fat had required the support of portable suspensors.

"You see," the basso voice rumbled, "it is only your maternal grandfather. You know me. I was the Baron Vladimir Harkonnen."

"You're . . . you're dead!" she gasped.

"But, of course, my dear! Most of us within you are dead. But none of the others are really willing to help you. They don't understand you."

"Go away," she pleaded. "Oh, please go away."

"But you need help, granddaughter," the Baron argued.

How remarkable he looks, she thought, watching the projection of the Baron against her closed eyelids.

"I'm willing to help you," the Baron wheedled. "The others in here would only fight to take over your entire consciousness. Any one of them would try to drive you out. But me . . . I want only a little corner of my own."

Again, the other lives within her lifted their clamor. The tide once more threatened to engulf her and she heard her mother's voice screeching. And Alia thought: *She's not dead.*

"Shut up!" the Baron commanded.

Alia felt her own desires reinforcing that command, making it felt throughout her awareness.

Inner silence washed through her like a cool bath and she felt her hammering heart begin slowing to its normal pace. Soothingly, the Baron's voice intruded: "You see? Together, we're invincible. You help me and I help you."

"What . . . what do you want?" she whispered.

A pensive look came over the fat face against her closed eyelids. "Ahhh, my darling granddaughter," he said, "I wish only a few simple pleasures. Give me but an occasional moment of contact with your senses. No one else need ever know. Let me feel but a small corner of your life when, for example, you are enfolded in the arms of your lover. Is that not a small price to ask?"

"Y . . . yes."

"Good, good," the Baron

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chortled. "In return, my darling granddaughter, I can serve you in many ways. I can advise you, help you with my counsel. You will be invincible within and without. You will sweep away all opposition. History will forget your brother and cherish you. The future will be yours."

"You . . . won't let . . . the . . . the others take over?"

"They cannot stand against us! Singly, we can be overcome, but together we command. I will demonstrate. Listen."

And the Baron fell silent, withdrawing his image, his inner presence. Not one memory, face or voice of the other lives intruded.

Alia allowed herself a trembling sigh.

Accompanying that sigh came a thought. It forced itself into her awareness as though it were her own, but she sensed silent voices behind it.

The old Baron was evil. He murdered your father. He would've killed you and Paul. He tried to and failed.

The Baron's voice came to her without a face: "Of course I would've killed you. Didn't you stand in my way? But that argument is ended. You've won it, child. You're the new truth."

She felt herself nodding and her cheek moved scratchingly against the harsh surface of the bench.

His words were reasonable, she thought. A Bene Gesserit precept reinforced the reasonable character of his words.

"The purpose of argument is to change the nature of truth."

Yes . . . that was the way the Bene Gesserits would have it.

"Precisely!" the Baron said. "And I am dead while you are alive. I have only a fragile existence. I'm a mere memory-self within you. I am yours to command. And how little I ask in return for the profound advice which is mine to deliver."

"What do you advise me to do now?" she asked, testing.

"You're worried about the judgment you gave last night," he said. "You wonder if Paymon's words were reported truthfully. Perhaps Javid saw in this Paymon a threat to his position of trust. Is this not the doubt which assails you?"

"Y-yes."

"And your doubt is based on acute observation, is it not? Javid behaves with increasing intimacy toward your person. Even Duncan has noted it, hasn't he?"

"You know he has."

"Very well, then. Take Javid for your lover and . . ."

"No!"

"You worry about Duncan? But your husband is a mentatmystic. He cannot be touched or harmed by activities of the flesh. Have you not felt sometimes how distant he is from you?"

"B-but he . . ."

"Duncan's mentat part would understand should he ever have need to know the device you employed in destroying Javid."

"Destroy . . ."

"Certainly! Dangerous tools may be used, but they should be cast aside when they grow too dangerous."

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"Then . . . why should . . . I mean . . ."

"Ahhh, you precious dunce. Because of the value contained in the lesson."

"I don't understand."

"Values, my dear grandchild, depend for their acceptance upon their success. Javid's obedience must be unconditional, his acceptance of your authority absolute, and his . . ."

"The morality of this *lesson* escapes . . ."

"Don't be dense, grandchild! Morality must always be based on practicality. Render unto Caesar and all of that nonsense. A victory is useless unless it reflects your deepest wishes. Is it not true that you have admired Javid's manliness?"

Alia swallowed, hating the admission, but forced to it by her complete nakedness before the *inner-watcher*. "Ye-es."

"Good!" How jovial the word sounded within her head. "Now, we begin to understand each other. When you have him helpless, then, in your bed, convinced that you are *his* thrall, you will ask him about Paymon. Do it jokingly: a rich laugh between you. And when he admits the deception, you will slip a crysknife between his ribs. Ahhh, the flow of blood can add so much to your satis . . ."

"No," she whispered, her mouth dry with horror. "No . . . no . . . no . . ."

"Then I will do it for you," the Baron argued. "It must be done: you admit that. If you but set up the conditions, I will assume temporary sway over . . ."

"No!"

"Your fear is so transparent, granddaughter. My sway of your senses cannot be else but temporary. There are others, now, who could mimic you to a perfection that . . . But you know this. With me, ahhh, people would spy out my presence immediately. You know the Fremen law for those possessed. You'd be slain out of hand. Yes . . . even you. And you know I do not want *that* to happen. I'll take care of Javid for you and, once it's done, I'll step aside. You need only . . ."

"How is this good advice?"

"It rids you of a dangerous tool. And, child, it sets up the working relationship between us, a relationship which can only teach you well about future judgments which . . ."

"Teach me?"

"Naturally!"

Alia put her hands over her eyes, trying to think, knowing that any thought might be known to this presence within her, that a thought might originate with that presence and be taken as her own.

"You worry yourself needlessly," the Baron wheedled. "This Paymon fellow, now, was . . ."

"What I did was wrong! I was tired and acted hastily. I should've sought confirmation of . . ."

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"You did right! Your judgments cannot be based on any such foolish abstract as that Atreides notion of equality. That's what kept you sleepless, not Paymon's death. You made a good decision! He was another dangerous tool. You acted to maintain order in your society. Now, there's a good reason for judgments, not this *justice* nonsense! There's no such thing as equal justice anywhere. It's unsettling to a society when you try to achieve such a false balance."

Alia felt pleasure at this defense of her judgment against Paymon, but shocked at the amoral concept behind the argument. "Equal justice was an Atreides . . . was . . ." She took her hands from her eyes, but kept her eyes closed.

"All of your priestly judges should be admonished about this error," the Baron argued. "Decisions must be weighed only as to their merit in maintaining an orderly society. Past civilizations without number have foundered on the rocks of equal justice. Such foolishness destroys the natural hierarchies which are far more important. Any individual takes on significance only in his relationship to your total society. Unless that society be ordered in logical steps, no one can find a place in it—not the lowliest or the highest. Come, come, grandchild! You must be the stern mother of your people. It's your duty to maintain order."

"Everything Paul did was . . ."

"Your brother's dead, a failure!"

"So are you!"

"True . . . but with me it was an accident beyond my designing. Come now, let us take care of this Javid as I have outlined it for you."

She felt her body grow warm at the thought, spoke quickly: "I must think about it." And she thought: *If it's done, it'll be only to put Javid in his place. No need to kill him for that. And the fool might just give himself away . . . in my bed.*

"To whom do you talk, My Lady?" a voice asked.

For a confused moment, Alia thought this another intrusion by those clamorous multitudes within, but recognition of the voice opened her eyes. Ziarenka Valefor, chief of Alia's guardian amazons, stood beside the bench, a worried frown on her weathered Fremen features.

"I speak to my inner voices," Alia said, sitting up on the bench. She felt refreshed, buoyed up by the silencing of that distracting inner clamor.

"Your inner voices, My Lady. Yes." Ziarenka's eyes glistened at this information. Everyone knew the Holy Alia drew upon inner resources available to no other person.

"Bring Javid to my quarters," Alia said. "There's a serious matter I must discuss with him."

"To your quarters, My Lady?"

"Yes! To my private chamber."

"As My Lady commands." The guard turned to obey.

"One moment," Alia said. "Has Master Idaho already gone to Sietch Tabr?"

"Yes, My Lady. He left before dawn as you instructed. Do you wish me to send for . . ."

"No; I will manage this myself.

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And, Zia, no one must know that Javid is being brought to me. Do it yourself. This is a very serious matter."

The guard touched the crysknife at her waist. "My Lady, is there a threat to . . ."

"Yes, there's a threat and Javid may be at the heart of it."

"Ohhh, My Lady, perhaps I should not bring . . ."

"Zia! Do you think me incapable of handling such a one?"

A lupine smile touched the guard's mouth. "Forgive me, My Lady. I will bring him to your private chamber at once, but . . . with My Lady's permission, I will mount guard outside your door."

"You only," Alia said.

"Yes, My Lady. I go at once."

Alia nodded to herself, watching Ziarenka's retreating back. Javid was not loved among her guards, then. Another mark against him. But he was still valuable . . . very valuable. He was her key to Jacurutu and with that place—well.

"Perhaps you were right, Baron," she whispered.

"You see," the voice within her chortled. "Ahhh, this will be a pleasant service to you, child. And it's only the beginning . . ."

A sophisticated human can become primitive. What this really means is that the human's way of life changes. Old values change, become linked to the landscape with its plants and animals. This new existence requires a working knowledge of those multiplex and cross-linked events usually referred to as *nature*. It requires a measure of respect for the inertial power within such *natural* systems. When a human gains this working knowledge and respect, that is called "being primitive." The converse, of course, is equally true: the primitive can become sophisticated, but not without accepting dreadful psychological damage.

—The Leto Commentary
After Harq al-Ada

"How can we be sure?" Ghanima asked. "This is very dangerous."

"We've tested it before," Leto argued.

"It may not be the same this time. What if . . ."

"It's the only way open to us," Leto said. "You agree we can't go the way of the spice."

Ghanima sighed. She did not like this thrust and parry of words, but knew the necessity which pressed her brother. She also knew the fearful source of her own reluctance. They had but to look at Alia and know the perils of that inner world.

"Well?" Leto asked.

Again, she sighed.

They sat cross-legged in one of their private places, a narrow opening from the cave to the cliff where often their mother and father had watched the sun set over the bled. It was two hours past the evening meal, a time when the twins were expected to exercise their bodies and their minds. They had chosen to flex their minds.

"I will try it alone if you refuse to help," Leto said.

Ghanima looked away from him

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toward the black hangings of the moisture seals which guarded this opening in the rock. Leto continued to stare out over the desert.

They had been speaking for some time in a language so ancient that even its name remained unknown in these times. The language gave their thoughts a privacy which no other human could penetrate. Even Alia, who avoided the intricacies of her inner world, lacked the mental linkages which would allow her to grasp any more than an occasional word.

Leto inhaled deeply, taking in the distinctive furry odor of a Fremen cavern-sietch which persisted in this windless alcove. The murmurous hubbub of the sietch and its damp heat were absent here and both felt this as a relief.

"I agree we need guidance," Ghanima said. "But if we . . ."

"Ghani! We need more than guidance. We need protection."

"Perhaps there is no protection." She looked directly at her brother, met that gaze in his eyes like the waiting watchfulness of a predator. His eyes belied the placidity of his features.

"We must escape possession," Leto said. He used the special infinitive of the ancient language, a form strictly neutral in voice and tense, but profoundly active in its implications. Ghanima correctly interpreted his argument.

"Mohw'pwium d'mi hish pash moh'm ka," she intoned. *"The capture of my soul is the capture of a thousand souls."*

"Much more than that," he countered.

"Knowing the dangers, you persist." She made it a statement, not a question.

"Wabun 'k wabunat!" he said. *"Rising, thou risest!"*

He felt his choice as an obvious necessity. Doing this thing, it were best done actively. They must wind the past into the present and allow it to unreel into their future.

"Muriyat," she conceded, her voice low. *"It must be done lovingly."*

"Of course." He waved a hand to encompass total acceptance. "Then we will consult as our parents did."

Ghanima remained silent, tried to swallow past a lump in her throat. Instinctively, she glanced south toward the great open erg which was showing a dim gray pattern of dunes in the last of the day's light. In that direction her father had gone on his last walk into the desert.

Leto stared downward over the cliff edge at the green of the sietch oasis. All was dusk down there, but he knew its shapes and colors: blossoms of copper, gold, red, yellow, rust and russet spread right out to the rock markers which outlined the extent of the qanat-watered plantings. Beyond the rock markers stretched a stinking band of dead Arrakeen life, killed by foreign plants and too much water, now a barrier against the desert.

Presently, Ghanima said: "I am ready. Let us begin."

"Yes, damn all!" He reached out, touched her arm to soften the exclamation, said: "Please, Ghani . . . sing that song. It makes this easier for me."

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Ghanima hitched herself closer to him, circled his waist with her left arm. She drew in two deep breaths, cleared her throat and began singing in a clear piping voice the words her mother had so often sung for her father.

"Here I redeem the pledge thou gavest:

I pour sweet water upon thee.

Life shall prevail in this windless place:

My love, thou shalt live in a palace,

Thy enemies shall fall to emptiness.

We travel this path together

Which love has traced for thee.

Surely well do I show the way

For my love is thy palace . . ."

Her voice fell into the desert silence which even a whisper might despoil, and Leto felt himself sinking, sinking—becoming the father whose memories spread like an overlayer in the genes of his immediate past.

For this brief space, I must be Paul, he told himself. *This is not Ghani beside me; it is my beloved Chani whose wise counsel has saved us both many a time.*

For her part, Ghanima had slipped into the persona-memory of her mother with frightening ease, as she had known she would. How much easier this was for the female . . . and how much more dangerous.

In a voice turned suddenly husky, Ghanima said: "Look there, beloved!" First Moon had risen and, against its cold light, they saw an arc of orange fire falling upward into space. The transport which had brought the Lady Jessica, laden now with spice, was returning to its mother-cluster in orbit.

The keenest of remembrances ran through Leto then, bringing memories like bright bellsounds. For a flickering instant, he was another Leto—Jessica's Duke. Necessity pushed those memories aside, but not before he felt the piercing of the love and the pain. *I must be Paul,* he reminded himself.

The transformation came over him with a frightening duality, as though Leto were a dark screen against which his father was projected. He felt both his own flesh and his father's, and the flickering differences threatened to overcome him.

"Help me, Father," he whispered.

The flickering disturbance passed and now there was another imprint upon his awareness, while his own identity as Leto stood at one side as an observer.

"My last vision has not yet come to pass," he said, and the voice was Paul's. He turned to Ghanima. "You know what I saw."

She touched his cheek with her right hand. "Did you walk into the desert to die, beloved? Is that what you did?"

"It may be that I did, but that vision . . . Would that not be reason enough to stay alive?"

"But blind?" she asked.

"Even so."

"Where could you go?"

He took a deep, shuddering breath. "Jacurutu."

"Beloved!" Tears began flowing down her cheeks.

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"Muad'Dib, the hero, must be destroyed utterly," he said. "Otherwise, this child cannot bring us back from chaos?"

"The Golden Path," she said. "It is not a good vision."

"It's the only possible vision."

"Alia has failed, then . . ."

"Utterly. You see the record of it."

"Your mother has returned too late." She nodded, and it was Chani's wise expression on the childish face of Ghanima. "Could there not be another vision? Perhaps if . . ."

"No, beloved. Not yet. This child cannot peer into the future yet and return safely."

Again, a shuddering breath disturbed his body, and Leto-observer felt the deep longing of his father to live once more in vital flesh, to make living decisions and . . . how desperate the need to unmake past mistakes!

"Father!" Leto called and it was as though he shouted echoingly within his own skull.

It was a profound act of will which Leto felt then: the slow, clinging withdrawal of his father's internal presence, the release of senses and muscles.

"Beloved," Chani's voice whispered beside him, and the withdrawal slowed. "What is happening?"

"Don't go yet," Leto said, and it was his own voice, rasping and uncertain, still his own. Then: "Chani, you must tell us: How do we avoid . . . what has happened to Alia?"

It was Paul-within who answered him, though, with words which fell upon his inner ear, halting and with long pauses: "There is no certainty. You . . . saw . . . what almost . . . happened . . . with . . . me."

"But Alia . . ."

"The damned Baron has her!"

Leto felt his throat burning with dryness. "Is he . . . have I . . ."

"He's in you . . . but . . . I . . . we cannot . . . sometimes we sense . . . each other, but you . . ."

"Can you not read my thoughts?" Leto asked. "Would you know then if . . . he . . ."

"Sometimes, I can feel your thoughts . . . but I . . . we live only through . . . the . . . reflection of . . . your awareness. Your memory creates us. The danger . . . it is a precise memory. And . . . those of us . . . those of us who loved power . . . and gathered it at . . . any price . . . those can be . . . more precise."

"Stronger?" Leto whispered.

"Stronger."

"I know your vision," Leto said. "Rather than let him have me, I'll become you."

"Not that!"

Leto nodded to himself, sensing the enormous will-force his father had required to withdraw, recognizing the consequences of failure. *Any* possession reduced the possessed to Abomination. The recognition gave him a renewed sense of strength, and he felt his own body with abnormal acuteness and a deeply-drawn awareness of past mistakes: his own and those of his ancestors. It was the uncertainties which weakened . . . he saw this now. For an instant, temptation

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warred with fear within him. This flesh possessed the ability to transform melange into a vision of the future. With the spice, he could breathe the future, shatter time's veils. He found the temptation difficult to shed, clasped his hands and sank into the prana-bindu awareness. His flesh negated the temptation. His flesh wore the deep knowledge learned in blood by Paul. Those who sought the future hoped to gain the winning gamble on tomorrow's race. Instead, they found themselves trapped into a lifetime whose every heartbeat and anguished wail was known. Paul's final vision had shown the precarious way out of that trap, and Leto knew now that he had no other choice but to follow that way.

"The joy of living, its beauty, is all bound up in the fact that life can surprise you," he said.

A soft voice whispered in his ear: "I've always known that beauty."

Leto turned his head, stared into Ghanima's eyes which glistened in the bright moonlight. He saw Chani looking back at him. "Mother," he said, "you must withdraw."

"Ahhh, the temptation," she said, and kissed him.

He pushed her away. "Would you take your daughter's life?" he demanded.

"It's so easy . . . so foolishly easy," she said.

Leto, feeling panic begin to grip him, remembered what an effort of will his father's persona-within had required to abandon the flesh. Was Ghanima lost in that observer-world where he had watched and listened, learning what he had required from his father?

"I will despise you, Mother," he said.

"Others won't despise me," she said. "Be my beloved."

"If I do . . . you know what you both will become," he said. "My father will despise you."

"Never!"

"I will!"

The sound was jerked out of his throat without his volition and it carried all the old overtones of Voice which Paul had learned from his witch mother.

"Don't say it," she moaned.

"I will despise you!"

"Please . . . please don't say it."

Leto rubbed his throat, feeling the muscles become once more his own. "He will despise you. He will turn his back on you. He will go into the desert again."

"No . . . no . . ."

She shook her head from side to side.

"You must leave, Mother," he said.

"No . . . no . . ." But the voice lacked its original force.

Leto watched his sister's face. How the muscles twitched! Emotions fled across the flesh at the turmoil within her.

"Leave," he whispered. "Leave."

"No-o-o-o . . ."

He gripped her arm, felt the tremors which pulsed through her muscles, the nerves twitching. She writhed, tried to pull away, but he held tightly to her arm, whispering: "Leave . . . leave . . ."

And all the time, Leto berated

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himself for talking Ghani into this *parent game* which once they'd played often, but she had lately resisted. It was true that the female had more weakness in that inner assault, he realized. There lay the origin of the Bene Gesserit fear.

Hours passed and still Ghanima's body trembled and twitched with the inner battle, but now his sister's voice joined the argument. He heard her talking to that imago within, the pleading.

"Mother . . . please—" And once: "You've seen Alia! Will you become another Alia?"

At last, Ghanima leaned against him, whispered: "She has accepted it. She's gone."

He stroked her head. "Ghani, I'm sorry. I'm sorry. I'll never ask you to do that again. I was selfish. Forgive me."

"There's nothing to forgive," she said, and her voice came panting as though after great physical exertion. "We've learned much that we needed to know."

"She spoke to you of many things," he said. "We'll share it later when . . ."

"No! We'll do it now. You were right."

"My Golden Path?"

"Your damned Golden Path!"

"Logic's useless unless it's armed with essential data," he said. "But I . . ."

"Grandmother came back to guide our education and to see if we'd been . . . contaminated."

"That's what Duncan says. There's nothing new in . . ."

"Prime computation," she agreed, her voice strengthening. She pulled away from him, looked out at the desert which lay in a predawn hush. This battle . . . this knowledge, had cost them a night. The royal guard beyond the moisture seal must've had much to explain. Leto had charged that nothing disturb them.

"People often learn subtlety as they age," Leto said. "What is it we're learning with all of this agedness to draw upon?"

"The universe as we see it is never quite the exact physical universe," she said. "We mustn't perceive this grandmother just as a grandmother."

"That'd be dangerous," he agreed. "But my ques. . ."

"There's something beyond subtlety," she said. "We must have a place in our awareness to perceive what we can't preconceive. That's why . . . my mother spoke to me often of Jessica. At the last, when we were both reconciled to the inner exchange, she said many things." Ghanima sighed.

"We *know* she's our grandmother," he said. "You were with her for hours yesterday. Is that why . . ."

"If we allow it, our *knowing* will determine how we react to her," Ghanima said. "That's what my mother kept warning me. She quoted our grandmother once and . . ." Ghanima touched his arm. ". . . I heard the echo of it within me in our grandmother's voice."

"Warning you," Leto said. He found this thought disturbing. Was nothing in this world dependable?

"Most deadly errors arise from obsolete assumptions," Ghanima

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said. "That's what my mother kept quoting."

"That's pure Bene Gesserit."

"If . . . if she has gone back to the Sisterhood completely . . ."

"That'd be very dangerous to us," he said, completing the thought. "We carry the blood of their Kwisatz Haderach—their male Bene Gesserit."

"They won't abandon that search," she said, "but they may abandon us. "Our grandmother could be the instrument."

"There's another way," he said.

"Yes . . . the two of us . . . mated. But they know what recessives might complicate that pairing."

"It's a gamble they must've discussed."

"And with our grandmother, at that. I don't like that way."

"Nor I."

"Still, it's not the first time a royal line has tried to . . ."

"It repels me," he said, shuddering.

She felt the movement, fell silent.

"Power," he said.

And in that strange alchemy of their similarities, she knew where his thoughts had been. "The power of the Kwisatz Haderach must fail," she agreed.

"Used in their way," he said.

In that instant, day came to the desert beyond their vantage point. They sensed the heat beginning. Colors leaped forth from the plantings beneath the cliff. Gray-green leaves sent spiked shadows along the ground. The low morning light of Dune's silvery sun revealed the verdant oasis full of golden and purple shadows in the well of the sheltering cliffs.

Leto stood, stretched.

"The Golden Path, then," Ghanima said, and she spoke as much to herself as to him, knowing how their father's last vision met and melted into Leto's dreams.

Something brushed against the moisture seals behind them and voices could be heard there.

Leto reverted to the ancient language they used for privacy: "L'ii ani howr samis sm'kwi owr samit sut."

That was where the decision lodged itself in their awareness. Literally: "We will accompany each other into deathliness, though only one may return to report it."

Ghanima stood then and, together, they returned through the moisture seals to the sietch where the guards aroused themselves and fell in behind as the twins headed toward their own quarters. The morning throngs parted before them with a difference on this morning, exchanging glances with the guards. Spending the night alone above the desert was an old Fremen custom for the holy sages. All the Umma had practiced this form of vigil. Paul Muad'Dib had done it . . . and Alia. Now, the royal twins had begun.

Leto noted the difference, mentioned it to Ghanima.

"They don't know what we've decided for them," she said. "They don't really know."

Still in the private language, he said: "It requires the most fortuitous beginning."

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Ghanima hesitated a moment to form her thoughts, then: "In that time, mourning for the sibling, it must be exactly real—even to the making of the tomb. The heart must follow the sleep lest there be no awakening."

In the ancient tongue, it was an extremely convoluted statement, employing a pronominal object separated from the infinitive. It was a syntax which allowed each set of internal phrases to turn upon itself, becoming several different meanings, all definite and quite distinct, but subtly interrelated. In part, what she had said was that they risked death with Leto's plan and, real or simulated, it made no difference. The resultant change would be like death, literally: ". . . funeral murder." And there was an added meaning to the whole which pointed accusatively at whoever *survived* to report, that is: *act out the living part.* Any misstep there would negate the entire plan and Leto's Golden Path would become a dead end.

"Extremely delicate," Leto agreed. He parted the hangings for them as they entered their own anteroom.

Activity among their attendants paused only for a heartbeat as the twins crossed to the arched passage which led into the quarters assigned to the Lady Jessica.

"You are not Osiris," Ghanima reminded him.

"Nor will I try to be."

Ghanima took his arm to stop him. "Alia darsatay haunus m'smow," she warned.

Leto stared into his sister's eyes. Indeed, Alia's actions did give off a foul smell which their grandmother must have noted. He smiled appreciatively at Ghanima. She had mixed the ancient tongue with Fremen superstition to call up a most basic tribal omen. *M'smow*, the foul odor of a summer night, was the harbinger of death at the hands of demons. And Osiris had been the demon-goddess of death to the people whose tongue they now spoke.

"We Atreides have a reputation for audacity to maintain," he said.

"So we'll *take* what we need," she said.

"It's that or become petitioners before our own Regency," he said. "Alia would enjoy that."

"But our plan . . ." She let it trail off.

Our plan, he thought. She shared it completely now. He said: "I think of our plan as the toil of the shaduf."

Ghanima glanced back at the anteroom through which they'd passed, smelling the furry odors of morning with their sense of eternal beginning. She liked the way Leto had employed their private language. *Toil of the shaduf.* It was a pledge. He'd called their plan agricultural work of a very menial kind: fertilizing, irrigating, weeding, transplanting, pruning—yet with the Fremen implication that this labor occurred simultaneously in *Another World* where it symbolized cultivating the richness of the soul.

Ghanima studied her brother as they hesitated here in the rock passage. It had grown increasingly obvious to her that he was pleading

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on two levels: one, for the Golden Path of his vision and their father's, and two, that she allow him free reign to carry out the extremely dangerous myth-creation which the plan generated. This frightened her. Was there more to his private vision that he had not shared? Could he see himself as the potentially deified figure to lead humankind into a rebirth? Like father, like son? The cult of Maud'Dib had turned sour, fermenting in Alia's mismanagement and the unbridled license of a military priesthood which rode the Fremen power. Leto wanted regeneration.

He's hiding something from me, she realized.

She reviewed what he had told her of his dream. It held such iridescent reality that he might walk around for hours afterward in a daze. The dream never varied, he said.

"I am on sand in bright yellow daylight, yet there is no sun. Then I realize that I am the sun. My light shines out as a golden path. When I realize this, I move out of myself. I turn, expecting to see myself as the sun. But I am not the sun; I am a stick figure, a child's drawing with zig-zag lightning lines for eyes, stick legs and stick arms. There is a scepter in my left hand, and it's a real scepter—much more detailed in its reality than the stick figure which holds it. The scepter moves and this terrifies me. As it moves, I feel myself awaken, yet I know I'm still dreaming. I realize then that my skin is encased in something—an armor which moves as my skin moves. I cannot see this armor, but I feel it. My terror leaves me then, for this armor gives me the strength of ten thousand men."

As Ghanima stared at him, Leto tried to pull away, to continue their course toward Jessica's quarters. Ghanima resisted.

"This Golden Path could be no better than any other path," she said.

Leto looked at the rock floor between them, feeling the strong return of Ghanima's doubts. "I must do it," he said.

"Alia is possessed," she said. "That could happen to us. It could already have happened and we might not know it."

"No." He shook his head, met her gaze. "Alia resisted. That gave the powers within her their strength. By her own strength she was overcome. We've dared to search within, to seek out the old languages and the old knowledge. We're already amalgams of those lives within us. We don't resist; we ride with them. This was what I learned from our father last night. It's what I had to learn."

"He said nothing of that within me."

"You listened to our mother. It's what we . . ."

"And I almost lost."

"Is she still strong within you?" Fear tightened his face.

"Yes . . . but now I think she guards me with her love. You were very good when you argued with her." And Ghanima thought about the reflected mother-within, said: "Our mother exists now for me in the alam al-mythal with the others,

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but she has tasted the fruit of hell. Now, I can listen to her without fear. As to the others . . ."

"Yes," he said. "And I listened to my father, but I think I'm really following the counsel of the grandfather for whom I was named. Perhaps the name makes it easy."

"Are you counseled to speak to our grandmother of the Golden Path?"

Leto waited while an attendant pressed past them with a basket-tray carrying the Lady Jessica's breakfast. A strong smell of spice filled the air as the attendant passed.

"She lives in us and in her own flesh," Leto said. "Her counsel can be consulted twice."

"Not by me," Ghanima protested. "I'm not risking that again."

"Then by me."

"I thought we agreed that she's gone back to the Sisterhood."

"Indeed. Bene Gesserit at her beginning, her own creature in the middle, and Bene Gesserit at the end. But remember that she, too, carries Harkonnen blood and is closer to it than we are, that she has experienced a form of this inner sharing which we have."

"A very shallow form," Ghanima said. "And you haven't answered my question."

"I don't think I'll mention the Golden Path."

"I may."

"Ghani!"

"We don't need any more Atreides gods! We need a space for some humanity!"

"Have I ever denied it?"

"No." She took a deep breath and looked away from him. Attendants peered in at them from the anteroom, hearing the argument by its tone but unable to understand the anicent words.

"We have to do it," he said. "If we fail to act, we might just as well fall upon our knives." He used the Fremen form which carried the meaning of "spill our water into the tribal cistern."

Once more, Ghanima looked at him. She was forced to agree. But she felt trapped within a construction of many walls. They both knew a day of reckoning lay across their path no matter what they did. Ghanima knew this with a certainty reinforced by the data garnered from those other memory-lives, but now she feared the strength which she gave those other psyches by using the data of their experiences. They lurked like harpies within her, shadow demons waiting in ambush.

Except for her mother, who had held the fleshly power and had renounced it. Ghanima still felt shaken by that inner struggle, knowing she would have lost but for Leto's persuasiveness.

Leto said his Golden Path led out of this trap. Except for the nagging realization that he withheld something from his vision, she could only accept his sincerity. He needed her fertile creativity to enrich the plan.

"We'll be tested," he said, knowing where her doubts led.

"Not in the spice."

"Perhaps even there. Surely, in the desert and in the Trial of Possession."

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"You never mentioned the Trial of Possession!" she accused. "Is that part of your dream?"

He tried to swallow in a dry throat, cursed this betrayal. "Yes."

"Then we will be . . . possessed?"

"No."

She thought about the Trial—that ancient Fremen examination whose ending most often brought hideous death. Then this plan had other complexities. It would take them onto an edge where a plunge to either side might not be countenanced by the human mind and that mind remain sane.

Knowing where her thoughts meandered, Leto said: "Power attracts the psychotics. Always. That's what we have to avoid within ourselves."

"You're sure we won't be . . . possessed?"

"Not if we create the Golden Path."

Still doubtful, she said: "I'll not bear your children, Leto."

He shook his head, suppressing the inner betrayals, lapsed into the royal-formal form of the ancient tongue: "Sister mine, I love you more dearly than myself, but that is not the tender of my desires."

"Very well, then let us return to another argument before we join our grandmother. A knife slipped into Alia might settle most of our problems."

"If you believe that, you believe you can walk in mud and leave no tracks," he said. "Besides, when has Alia ever given anyone an opportunity?"

"There is talk about this Javid."

"Does Duncan show any signs of growing horns?"

Ghanima shrugged. "One poison, two poison." It was the common label applied to the royal habit of cataloging companions by their threat to your person, a mark of rulers everywhere.

"We must do it my way," he said.

"The other way might be cleaner."

By her reply, he knew she had finally suppressed her doubts and come around to agreement with his plan. The realization brought him no happiness. He found himself looking at his own hands, wondering if the dirt would cling.

This was Muad'Dib's achievement: He saw the subliminal reservoir of each individual as an unconscious bank of memories going back to the primal cell of our common genesis. Each of us, he said, can measure out his distance from that common origin. Seeing this and telling of it, he made the audacious leap of decision. Muad'Dib set himself the task of integrating genetic memory into ongoing evaluation. Thus did he break through Time's veils, making a single thing of the future and the past. That was Muad'Dib's creation embodied in his son and his daughter.

—Testament of Arrakis
by Harq al-Ada

Farad'n strode through the garden compound of his grandfather's royal palace, watching his shadow grow shorter as the sun of Salusa Secundus climbed toward noon. He

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had to stretch himself a bit to keep step with the tall Bashar who accompanied him.

"I have doubts, Tyekanik," he said. "Oh, there's no denying the attractions of a throne, but . . ." He drew in a deep breath. ". . . I have so many interests."

Tyekanik, fresh from a savage argument with Farad'n's mother, glanced sidelong at the Prince, noting how the lad's flesh was firming as he approached his eighteenth birthday. There was less and less of Wensicia in him with each passing day and more and more of old Shaddam, who had preferred his private pursuits to the responsibilities of royalty. That was what had cost him the throne in the end, of course. He'd grown soft in the ways of command.

"You have to make a choice," Tyekanik said. "Oh, doubtless there'll be time for some of your interests, but . . ."

Farad'n chewed his lower lip. Duty held him here, but he felt frustrated. He would far rather have gone to the rock enclave where the sandtrout experiments were being conducted. Now, *there* was a project with enormous potential: wrest the spice monopoly from the Atreides and anything might happen.

"You're sure these twins will be . . . eliminated?"

"Nothing absolutely certain, My Prince, but the prospects are good."

Farad'n shrugged. Assassination remained a fact of royal life. The language was filled with the subtle permutations of ways to eliminate important personages. By a single word, one could distinguish between poison in drink or poison in food. He presumed the elimination of the Atreides twins would be accomplished by a poison. It was not a pleasant thought. By all accounts, the twins were a most interesting pair.

"Would we have to move to Arrakis?" Farad'n asked.

"It's the best choice, put us at the point of greatest pressure." Farad'n appeared to be avoiding some question and Tyekanik wondered what it might be.

"I'm troubled, Tyekanik," Farad'n said, speaking as they rounded a hedge corner and approached a fountain surrounded by giant black roses. Gardeners could be heard snipping beyond the hedges.

"Yes?" Tyekanik prompted.

"This . . . ah, religion which you've professed."

"Nothing strange about that, My Prince," Tyekanik said and hoped his voice remained firm. "This religion speaks to the warrior in me. It's a fitting religion for a Sardaukar." That, at least, was true.

"Yesss . . . but my mother seems so pleased by it."

Damn Wensicia! he thought. *She's made her son suspicious.*

"I care not what your mother thinks," Tyekanik said. "A man's religion is his own affair. Perhaps she sees something in this that may help to put you on the throne."

"That was my thought," Farad'n said.

Ahhh, this is a sharp lad! Tyekanik thought. He said: "Look into the religion for yourself; you'll see

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at once my reason for choosing it."

"Still . . . Muad'Dib's preachings? He was an Atreides, after all."

"I can only say that the ways of God are mysterious," Tyekanik said.

"I see. Tell me, Tyek, why'd you ask me to walk with you just now? It's almost noon and usually you're off to some place or other at my mother's command this time of day."

Tyekanik stopped at a stone bench which looked upon the fountain and the giant roses beyond. The splashing water soothed him and he kept his attention upon it as he spoke. "My Prince, I've done something which your mother may not like." And he thought: *If he believes that, her damnable scheme will work.* Tyekanik almost hoped Wensicia's scheme would fail. *Bringing that damnable Preacher here. She was insane. And the cost!*

As Tyekanik remained silent, waiting, Farad'n asked: "All right, Tyek, what've you done?"

"I've brought a practitioner of Oneiromancy," Tyekanik said.

Farad'n shot a sharp glance at his companion. Some of the older Sardaukar played the dream-interpretation game, had done so increasingly since their defeat by that "Supreme Dreamer: Muad'Dib." Somewhere within their dreams, they reasoned, might lay a way back to power and glory. But Tyekanik had always eschewed this play.

"This doesn't sound like you, Tyek," Farad'n said.

"Then I can only speak from my new religion," he said, addressing the fountain. To speak of religion was, of course, why they'd risked bringing The Preacher here.

"Then speak from this religion," Farad'n said.

"As My Prince commands." He turned, looked at this youthful holder of all the dreams which now were distilled into the path which House Corrino would follow. "Church and State, My Prince, even scientific reason and faith, and even more: progress and tradition—all of these are reconciled in the teachings of Muad'Dib. He taught that there are no intransigent opposites except in the beliefs of men and, sometimes, in their dreams. One discovers the future in the past and both are part of a whole."

In spite of doubts which he could not dispel, Farad'n found himself impressed by these words. He heard a note of reluctant sincerity in Tyek's voice, as though the man spoke against inner compulsions.

"And that's why you bring me this . . . this interpreter of dreams?"

"Yes, My Prince. Perhaps your dream penetrates Time. You win back your consciousness of your inner being when you recognize the universe as a coherent whole. Your dreams . . . well . . ."

"But I spoke idly of my dreams," Farad'n protested. "They are a curiosity, no more. I never once suspected that you . . ."

"My Prince, nothing you do can be unimportant."

"That's very flattering, Tyek. Do you really believe this fellow can

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see into the heart of great mysteries?"

"I do, My Prince."

"Then let my mother be displeased."

"You will see him?"

"Of course—since you've brought him to displease my mother."

Does he mock me? Tyekanik wondered. And he said: "I must warn you that the old man wears a mask. It is an Ixian device which enables the sightless to see with their skin."

"He is blind?"

"Yes, My Prince."

"Does he know who I am?"

"I told him, My Prince."

"Very well. Let us go to him."

"If My Prince will wait a moment here, I will bring the man to him."

Farad'n looked around the fountain garden, smiled. As good a place as any for this foolishness. "Have you told him what I dreamed?"

"Only in general terms, My Prince. He will ask you for a personal accounting."

"Oh, very well. I'll wait here. Bring the fellow."

Farad'n turned his back, heard Tyekanik retire in haste. A gardener could be seen working just beyond the hedge, the top of a brown-capped head, the flashing of shears poking above the greenery. The movement was hypnotic.

This dream business is nonsense, Farad'n thought. *It was wrong of Tyek to do this without consulting me. Strange that Tyek should get religion at his age. And now it's dreams.*

Presently, he heard footsteps behind him, Tyekanik's familiar positive stride and a more dragging gait. Farad'n turned, stared at the approaching dream interpreter. The Ixian mask was a black, gauzy affair which concealed the face from the forehead to below the chin. There were no eye slits in the mask. If one were to believe the Ixian boasts, the entire mask was a single eye.

Tyekanik stopped two paces from Farad'n, but the masked old man approached to less than a pace.

"The interpreter of dreams," *Tyekanik said.*

Farad'n nodded.

The masked old man coughed in a remote grunting fashion as though trying to bring something up from his stomach.

Farad'n was acutely conscious of a sour spice smell from the old man. It emanated from the long gray robe which covered his body.

"Is that mask truly a part of your flesh?" Farad'n asked, realizing he was trying to delay the subject of dreams.

"While I wear it," the old man said and his voice carried a bitter twang and just a suggestion of Fremen accent. "Your dream," he said. "Tell me."

Farad'n shrugged. *Why not?* That was why Tyek had brought the old man. Or was it? Doubts gripped Farad'n and he asked: "Are you truly a practitioner of Oneiromancy?"

"I have come to interpret your dream, Puissant Lord."

Again, Farad'n shrugged. This

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masked figure made him nervous and he glanced at Tyekanik, who remained where he had stopped, arms folded, staring at the fountain.

"Your dream, then," the old man pressed.

Farad'n inhaled deeply, began to relate the dream. It became easier to talk as he got fully into it. He told about the water flowing upward in the well, about the worlds which were atoms dancing in his head, about the snake which transformed itself into a sandworm and exploded in a cloud of dust. Telling about the snake, he was surprised to discover, required more effort. A terrible reluctance inhibited him and this made him angry as he spoke.

The old man remained impassive as Farad'n at last fell silent. The black gauze mask moved slightly to his breathing. Farad'n waited. The silence continued.

Presently, Farad'n asked: "Aren't you going to interpret my dream?"

"I have interpreted it," he said, his voice seeming to come from a long distance.

"Well?" Farad'n heard his own voice squeaking, telling him the tension his dream had produced.

Still, the old man remained impassively silent.

"Tell me, then!" The anger was obvious in his tone.

"I said I'd interpret," the old man said. "I did not agree to tell you my interpretation."

Even Tyekanik was moved by this, dropping his arms into balled fists at his sides. "What?" he grated.

"I did not say I'd reveal my interpretation," the old man said.

"You wish more pay?" Farad'n asked.

"I did not ask pay when I was brought here." A certain cold pride in the response softened Farad'n's anger. This was a brave old man, at any rate. He must know death could follow disobedience.

"Allow me, My Prince," Tyekanik said as Farad'n started to speak. Then: "Will you tell us why you won't reveal your interpretation?"

"Yes, My Lords. The dream tells me there would be no purpose in explaining these things."

Farad'n could not contain himself. "Are you saying I already know the meaning of my dream?"

"Perhaps, My Lord, but that is not my gist."

Tyekanik moved up to stand beside Farad'n. Both glared at the old man. "Explain yourself," Tyekanik said.

"Indeed," Farad'n said.

"If I were to speak of this dream, to explore these matters of water and dust, snakes and worms, to analyze the atoms which dance in your head as they do in mine—ahh, Puissant Lord, my words would only confuse you and you would insist upon misunderstanding."

"Do you fear that your words might anger me?" Farad'n demanded.

"My Lord! You're already angry with me."

"Is it that you don't trust us?" Tyekanik asked.

"That is very close to the mark,

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My Lord. I do not trust either of you and for the simple reason that you do not trust yourselves."

"You walk dangerously close to the edge," Tyekanik said. "Men have been killed for behavior less abusive than yours."

Farad'n nodded, said: "Don't tempt us to anger."

"The fatal consequences of Corrino anger are well known, My Lord of Salusa Secundus," the old man said.

Tyekanik put a restraining hand on Farad'n's arm, asked: "Are you trying to goad us into killing you?"

Farad'n had not thought of that, felt a chill now as he considered what such behavior might mean. Was this old man who called himself Preacher . . . was he more than he appeared? What might be the consequences of his death? Martyrs could be dangerous creations.

"I doubt that you'll kill me no matter what I say," The Preacher said. "I think you know my value, Bashar, and your Prince now suspects it."

"You absolutely refuse to interpret his dream?" Tyekanik asked.

"I *have* interpreted it."

"And you will not reveal what you see in it?"

"Do you blame me, My Lord?"

"How can you be valuable to me?" Farad'n asked.

The Preacher held out his right hand. "If I but beckon with this hand, Duncan Idaho will come to me and he will obey me."

"What idle boast is this?" Farad'n asked.

But Tyekanik shook his head, recalling his argument with Wensicia. He said: "My Prince, it could be true. This Preacher has many followers on Dune."

"Why didn't you tell me he was from that place?" Farad'n asked.

Before Tyekanik could answer, The Preacher addressed Farad'n: "My Lord, you must not feel guilty about Arrakis. You are but a product of your times. This is a special pleading which any man may make when his guilts assail him."

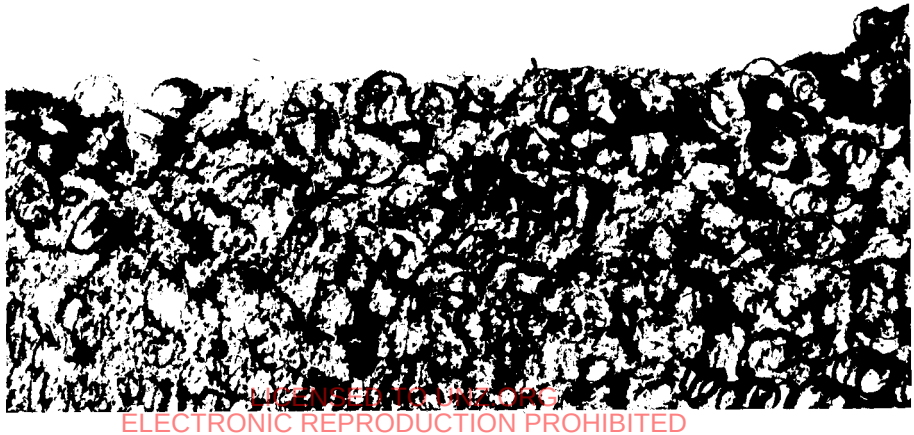
"Guilts!" Farad'n was outraged.

The Preacher only shrugged.

Oddly, this shifted Farad'n from outrage to amusement. He laughed, throwing his head back, drawing a startled glance from Tyekanik. Then: "I like you, Preacher."

"This gratifies me, Prince," the old man said.

Suppressing a chuckle, Farad'n said: "We'll find you an apartment here in the palace. You will be my



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official interpreter of dreams—even though you never give me a word of interpretation. And you can advise me about Dune. I have a great curiosity about that place."

"This I cannot do, Prince."

An edge of his anger returned. Farad'n glared at the black mask. "And why not, pray tell?"

"My Prince," Tyekanik said, again touching Farad'n's arm.

"What is it, Tyek?"

"We brought him here under bonded agreement with the Guild. He is to be returned to Dune."

"I am summoned back to Arrakis," The Preacher said.

"Who summons you?" Farad'n demanded.

"A power greater than thine, Prince."

Farad'n shot a questioning glance at Tyekanik. "Is he an Atreides spy?"

"Not likely, My Prince. Alia has put a price on his head."

"If it's not the Atreides, then who summons you?" Farad'n asked, returning his attention to The Preacher.

"A power greater than the Atreides."

A chuckle escaped Farad'n. This was only mystic nonsense. How could Tyek be fooled by such stuff? This Preacher had been *summoned*—most likely by a dream. Of what importance were dreams?

"This has been a waste of time, Tyek," Farad'n said. "Why did you subject me to this . . . this farce?"

"There is a double price here, My Prince," Tyekanik said. "This interpreter of dreams promised me to deliver Duncan Idaho as an agent of House Corrino. All he asked was to meet you and interpret your dream." And Tyekanik added to himself: *Or so he told Wensicia!* New doubts assailed the Bashar.

"Why is my dream so important to you, old man?" Farad'n asked.

"Your dream tells me that great events move toward a logical conclusion," The Preacher said. "I must hasten my return."

Mocking, Farad'n said: "And you will remain inscrutable, giving me no advice."

"Advice, Prince, is a dangerous commodity. But I will venture a few words which you may take as advice or in any other way which pleases you."

"By all means," Farad'n said.

The Preacher held his masked face rigidly confronting Farad'n. "Governments may rise and fall for reasons which appear insignificant, Prince. What small events! An argument between two women . . . which way the wind blows on a certain day . . . a sneeze, a cough, the length of a garment or the chance collision of a fleck of sand and a courtier's eye. It is not always the majestic concerns of imperial ministers which dictate the course of history, nor is it necessarily the pontifications of priests which move the hands of God."

Farad'n found himself profoundly stirred by these words and could not explain his emotion.

Tyekanik, however, had focused on one phrase. Why did this Preacher speak of a garment? Tyekanik's mind focused on the Imperial costumes dispatched to

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the Atreides twins, the tigers trained to attack. Was this old man voicing a subtle warning? How much did he know?

"How is this advice?" Farad'n asked.

"If you would succeed," The Preacher said, "you must reduce your strategy to its point of application. Where does one apply strategy? At a particular place and with a particular people in mind. But even with the greatest concern for minutiae, some small detail with no significance attached to it will escape you. Can your strategy, Prince, be reduced to the ambitions of a regional governor's wife?"

His voice cold, Tyekanik interrupted: "Why do you harp upon strategy, Preacher? What is it you think My Prince will have?"

"He is being led to desire a throne," The Preacher said. "I wish him good luck, but he will need much more than luck."

"These are dangerous words," Farad'n said. "How is it you dare?"

"Ambitions tend to remain undisturbed by realities," The Preacher said. "I dare such words because you stand at a crossroad. You could become admirable. But now you are surrounded by those who do not seek moral justifications, by advisers who are strategy-oriented. You are young and strong and tough, but you lack a certain advanced training by which your character might evolve. This is sad because you have weaknesses whose dimensions I have described."

"What do you mean?" Tyekanik demanded.

"Have a care when you speak," Farad'n said. "What is this weakness?"

"You've given no thought to the kind of society you might prefer," The Preacher said. "You do not consider the hopes of your subjects. Even the form of the Imperium which you seek has little shape in your imaginings." He turned his masked face toward Tyekanik. "Your eye is upon the power, not upon its subtle uses and its perils. Your future is filled, thus, with manifest unknowns: with arguing women, with coughs and windy days. How can you create an epoch when you cannot see every detail? Your tough mind will not serve you; it will serve your enemies. Even your dreams will desert you. This is where you are weak."

Farad'n studied the old man for a long space, wondering at the deeper issues implied by such thoughts, at the persistence of such discredited concepts. Morality! Social goals! These were myths to put beside belief in an upward movement of evolution.

Tyekanik said: "We've had enough words. What of the price agreed upon, Preacher?"

"Duncan Idaho is yours," The Preacher said. "Have a care how you use him. He is a jewel beyond price."

"Oh, we've a suitable mission for him," Tyekanik said. He glanced at Farad'n. "By your leave, My Prince?"

"Send him packing before I change my mind," Farad'n said. Then, glaring: "I don't like the way you've used me, Tyek!"

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"Forgive him, Prince," The Preacher said. "Your faithful Bashar does God's will without even knowing it." Bowing, The Preacher departed and Tyekanik hurried to see him away.

Farad'n watched the retreating backs, thought: *I must look into this religion which Tyek espouses.* And he smiled ruefully. *What a dream interpreter! But what matter? My dream was not an important thing.*

And he saw a vision of armor. The armor was not his own skin; it was stronger than plasteel. Nothing penetrated his armor—not knife or poison or sand, not the dust of the desert or its desiccating heat. In his right hand he carried the power to make the Coriolis storm, to shake the earth and erode it into nothing. His eyes were fixed upon the Golden Path and in his left hand he carried the scepter of the Sixth Sense. With the five senses of his flesh, he wielded that scepter in absolute mastery. And beyond the Golden Path, his eyes looked into eternity which he knew to be the food of his soul and of his everlasting flesh.

—Heighia, My Brother's Dream
from The Book of Ghanima

"It'd be better for me never to become Emperor," Leto said. "Oh, I don't imply that I've made my father's mistake and peered into the future with a glass of spice. I say this thing out of selfishness. My sister and I desperately need a time of freedom when we can learn how to live with what we are."

He fell silent, stared questioningly at the Lady Jessica. He'd spoken his piece as he and Ghanima had agreed. Now, what would be their grandmother's response?

Jessica studied her grandson in the low light of glowglobes which illuminated her quarters in Sietch Tabr. It was still early morning of her second day here and she'd already had disturbing reports that the twins had spent a night of vigil outside the sietch. What were they doing? She had not slept well and she felt fatigue acids demanding that she come down from the hyper-level which had sustained her through all the demanding necessities since that crucial performance at the spaceport. This was the sietch of her nightmares but outside, that was not the desert she remembered. *Where had all the flowers come from?* And the air around her felt too damp. Stillsuit discipline was lax among the young.

"What are you, child, that you need time to learn about yourself?" she asked.

He shook his head gently, knowing it to be a bizarre gesture of adulthood on a child's body, reminding himself that he must keep this woman off balance. "First, I am not a child. "Oh . . ." He touched his chest. "This is a child's body; no doubt of that. But *I* am not a child."

Jessica chewed her upper lip, disregarding what this betrayed. Her Duke, so many years dead on this accursed planet, had laughed at her when she did this. "*Your one unbridled response,*" he'd called that

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chewing of the lip. *"It tells me that you're disturbed, and I must kiss those lips to still their fluttering."*

Now, this grandson who bore the name of her Duke, shocked her into heart-pounding stillness merely by smiling and saying: "You are disturbed; I see it by the fluttering of those lips."

It required the most profound discipline of her Bene Gesserit training to restore a semblance of calm. She managed: "Do you taunt me?"

"Taunt you? Never. But I must make it clear to you how much we differ. Let me remind you of that sietch orgy so long ago when the Old Reverend Mother gave you her lives and her memories. She tuned herself to you and gave you that . . . that long chain of sausages, each one a person. You have them yet. So you know something of what Ghanima and I experience."

"And Alia?" Jessica asked, testing him.

"Didn't you discuss that with Ghani?"

"I wish to discuss it with you."

"Very well. Alia denied what she was and became that which she most feared. The *past-within* cannot be relegated to the unconscious. That is a dangerous course for any human, but for we who are preborn, it is worse than death. And that is all I will say about Alia."

"So you're not a child," Jessica said.

"I'm millions of years old. That requires adjustments which humans have never before been called upon to make."

Jessica nodded, calmer now, much more cautious than she'd been with Ghanima. And where was Ghanima? Why had Leto come here alone?

"Well, Grandmother," he said, "are we Abominations or are we the hope of the Atreides?"

Jessica ignored the question. "Where is your sister?"

"She distracts Alia to keep us from being disturbed. It is necessary. But Ghani would say nothing more to you than I've said. Didn't you observe that yesterday?"

"What I observed yesterday is my affair. Why do you prattle about Abomination?"

"Prattle? Don't give me your Bene Gesserit cant, Grandmother. I'll feed it back to you, word for word, right out of your own memories. I want more than the fluttering of your lips."

Jessica shook her head, feeling the coldness of this . . . *person* who carried her blood. The resources at his disposal daunted her. She tried to match his tone, asked: "What do you know of my intentions?"

He sniffed. "You needn't inquire whether I've made the mistake my father made. I've not looked outside our garden of time—at least not by seeking it out. Leave absolute knowledge of the future to those moments of *déjà vu* which any human may experience. I *know* the trap of prescience. My father's life tells me what I need to know about it. No, Grandmother: to know the future absolutely is to be trapped into that future absolutely. It collapses Time. Present becomes future. I require more freedom than that."

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Jessica felt her tongue twitch with unspoken words. How could she respond to him with something he didn't already know? This was monstrous! *He's me! He's my beloved Leto!* This thought shocked her. Momentarily, she wondered if the childish mask might not lapse into those dear features and resurrect . . . *No!*

Leto lowered his head, looked upward to study her. Yes, she could be maneuvered, after all. He said: "When you think of prescience, which I hope is rarely, you're probably no different from any other. Most people imagine how nice it would be to know tomorrow's quotation on the price of whale fur. Or whether a Harkonnen will once more govern their homeworld of Giedi Prime? But, of course, *we* know the Harkonnens without prescience, don't we, Grandmother?"

She refused to rise to his baiting. Of course he would know about the cursed Harkonnen blood in his ancestry.

"Who is a Harkonnen?" he asked, goading. "Who is Beast Rabban? Any one of us, eh? But I digress. I speak the popular myth of prescience: to *know* the future absolutely! All of it! What fortunes could be made—and lost—on such absolute knowledge, eh? The rabble believes this. They believe that if a little bit is good, more must be better. How excellent! And if you handed one of them the complete scenario of his life, the unvarying dialogue up to his moment of death—what a hellish gift that'd be. What utter boredom! Every living instant, he'd be replaying what he knew absolutely. No deviation. He could anticipate every response, every utterance—over and over and over and over and over and . . ."

Leto shook his head. "Ignorance has its advantages. A universe of surprises is what I pray for!"

It was a long speech and, as she listened, Jessica marveled at how his mannerisms, his intonations, echoed his father—her lost son. Even the ideas: these were things Paul might've said.

"You remind me of your father," she said.

"Is that hurtful to you?"

"In a way, but it's reassuring to know he lives on in you."

"How little you understand of how he lives on in me."

Jessica found his tone flat but dripping bitterness. She lifted her chin to look directly at him.

"Or how your Duke lives in me," Leto said. "Grandmother, Ghanima is *you!* She's you to such an extent that your life holds not a single secret from her up to the instant you bore our father. And me! What a catalog of fleshly recordings am I. There are moments when it is too much to bear. You come here to judge us? You come here to judge Alia? Better that we judge you!"

Jessica demanded answer of herself and found none. What was he doing? Why this emphasis on his difference? Did he court rejection? Had he reached Alia's condition—Abomination?

"This disturbs you," he said.

"It disturbs me." She permitted herself a futile shrug. "Yes, it disturbs me—and for reasons you

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know full well. I'm sure you've reviewed my Bene Gesserit training. Ghanima admits it. I know Alia . . . did. You know the consequences of your *difference.*"

He peered upward at her with disturbing intensity. "Almost we did not take this tack with you," he said and there was a sense of her own fatigue in his voice. "We know the fluttering of your lips as your lover knew them. Any bedchamber endearment your Duke whispered is ours to recall at will. You've accepted this intellectually no doubt. But I warn you that intellectual acceptance is not enough. If any of us becomes Abomination—it could be you within us who creates it! Or my father . . . or mother! Your Duke! Any one of you could possess us—and the condition would be the same."

Jessica felt a burning in her chest, dampness in her eyes. "Leto . . ." she managed, allowing herself to use his name at last. She found the pain less than she'd imagined it would be, forced herself to continue. ". . . what is it you want of me?"

"I would teach my grandmother."

"Teach me what?"

"Last night, Ghani and I played the mother-father roles almost to our destruction, but we learned much. There are things one can know, given an awareness of conditions. Actions can be predicted. Alia, now—it's well-nigh certainty that she's plotting to abduct you."

Jessica blinked, shocked by the swift accusation. She knew this trick well, had employed it many times: set a person up along one line of reasoning, then introduce the shocker from another line. She recovered with a sharp intake of breath.

"I know what Alia has been doing . . . what she *is*, but . . ."

"Grandmother, pity her. Use your heart as well as your intelligence. You've done that before. You pose a threat, and Alia wants the Imperium for her own—at least, the thing she has become wants this."

"How do I know this isn't another Abomination speaking?"

He shrugged. "That's where your heart comes in. Ghani and I know how she fell. It isn't easy to adjust to the clamor of that inner multitude. Suppress their egos and they will come crowding back every time you invoke a memory. One day . . ." He swallowed in a dry throat. ". . . a strong one from that inner pack decides it's time to share the flesh."

"And there's nothing you can do?" She asked the question although she feared the answer.

"We believe there is something . . . yes. We cannot succumb to the spice; that's paramount. And we must not suppress the past entirely. We must use it, make an amalgam of it. Finally, we will mix them all into ourselves—and we will no longer be our original selves, *but* we will not be possessed."

"You speak of a plot to abduct me."

"It's obvious. Wensicia is ambitious for her son. Alia is ambitious for herself, and . . ."

"Alia and Farad'n?"

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"That's not indicated," he said. "But Alia and Wensicia run parallel courses right now. Wensicia has a sister in Alia's house. What simpler thing than a message to . . ."

"You know of such a message?"

"As though I'd seen it and read its every word."

"But you've not seen such a message?"

"No need. I have only to know that the Atreides are all here together on Arrakis. All of the water in one cistern." He gestured to encompass the planet.

"House Corrino wouldn't dare attack us here!"

"Alia would profit if they did." A sneer in his voice provoked her.

"I won't be patronized by my own grandson!" she said.

"Then damn it, woman, stop thinking of me as your grandson! Think of me as your *Duke* Leto!" Tone and facial expression, even the abrupt hand gesture, were so exact that she fell silent in confusion.

In a dry, remote voice, Leto said: "I tried to prepare you. Give me that, at least."

"Why would Alia abduct me?"

"To blame it on House Corrino, of course."

"I don't believe it. Even for her, this would be . . . monstrous—too dangerous. How could she do it without . . . I cannot believe this!"

"When it happens, you'll believe. Ahh, Grandmother, Ghani and I have but to eavesdrop within ourselves and we *know*. It's simple self-preservation. How else can we even guess at the mistakes being made around us?"

"I do not for a minute accept that abduction is part of Alia's . . ."

"Gods below! How can you, a Bene Gesserit, be this dense? The whole Imperium suspects why you're here. Wensicia's propagandists are all prepared to discredit you. Alia can't wait for that to happen. If you go down, House Atreides could suffer a mortal blow."

"What does the whole Imperium suspect?" She measured out the words as coldly as possible, knowing she could not sway this *unchild* with any wile of Voice.

"The Lady Jessica plans to breed those twins together!" he rasped. "That's what the Sisterhood wants: Incest!"

She blinked. "Idle rumor." She swallowed. "The Bene Gesserits will not let such a rumor run wild in the Imperium. We still have some influence. Remember that."

"Rumor? What rumor? You've certainly held your options open on interbreeding us." He shook his head as she started to speak. "Don't deny it. Let us pass puberty still living in the same household and *you* in that household, and your *influence* will be no more than a rag waved in the face of a sandworm."

"Do you believe us to be such utter fools?" Jessica asked.

"Indeed I do. Your Sisterhood is nothing but a bunch of damn-fool old women who haven't thought beyond their precious breeding program! Ghani and I know the leverage they have. Do *you* think *us* fools?"

"Leverage?"

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"They know you're a Harkonnen! It'll be in their breeding records: Jessica out of Tanidia Nerus by the Baron Vladimir Harkonnen. That record *accidentally* made public would pull your teeth to . . ."

"You think the Sisterhood would stoop to blackmail?"

"I *know* they would. Oh, they coated it sweetly. They told you to investigate the rumors about your daughter. They fed your curiosity and your fears. They invoked your sense of responsibility, made you feel guilty because you'd fled back to Caladan. And they offered you the prospect of *saving* your grandchildren."

Jessica could only stare at him in silence. It was as though he'd eavesdropped on the emotional meetings with her Proctors from the Sisterhood. She felt completely subdued by his words and, now, began to accept the possibility that he spoke truth when he said Alia planned abduction.

"You see, Grandmother, I have a difficult decision to make," he said. "Do I follow the Atreides mystique? Do I live for my subjects . . . and die for them? Or do I choose another course—one which would permit me to live thousands of years?"

Jessica recoiled involuntarily. These words spoken so easily touched on a subect the Bene Gesserits made almost unthinkable. Many Reverend Mothers could choose that course . . . or try it. The manipulation of internal chemistry was available to initiates of the Sisterhood. But if one did it, sooner or later all would try it. There could be no concealing such an accumulation of ageless women. They knew for a certainty that this course would lead them to destruction. Short-lived humanity would turn upon them. No—it *was* unthinkable.

"I don't like the trend of your thoughts," she said.

"You don't understand my thoughts," he said. "Ghani and I . . ." He shook his head. "Alia had it in her grasp and threw it away."

"Are you sure of that? I've already sent word to the Sisterhood that Alia practices the unthinkable. Look at her! She's not aged a day since last I . . ."

"Oh, that!" He dismissed Bene Gesserit body balance with a wave of his hand. "I'm speaking of something else—a perfection of being far beyond anything humans have ever before achieved."

Jessica remained silent, aghast at how easily he'd lifted her disclosure from her. He'd know surely that such a message represented a death sentence on Alia. And no matter how he changed the words, he could only be talking about committing the same offense. Didn't he know the peril of his words?

"You must explain," she said finally.

"How?" he asked. "Unless you understand that Time isn't what it appears, I can't even begin to explain. My father suspected it. He stood at the edge of realization, but fell back. Now, it's up to Ghani and me."

"I insist that you explain," Jes-

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sica said and she fingered the poisoned needle she held beneath a fold of her robe. It was the gom jabbar, so deadly that the slightest prick of it killed within seconds. And she thought: *They warned me I might have to use it.* The thought sent the muscles of her arm trembling in waves and she was thankful for the concealing robe.

"Very well," he sighed. "First, as to Time: there is no difference between ten thousand years and one year; no difference between one hundred thousand years and a heartbeat. No difference. That is the first fact about Time. And the second fact: the entire universe with all of its Time is within me."

"What nonsense is this?" she demanded.

"You see? You don't understand. I will try to explain in another way, then." He raised his right hand to illustrate, moving it as he spoke. "We go forward, we come back."

"Those words explain nothing!"

"That is correct," he said. "There are things which words cannot explain. You must experience them without words. But you are not prepared for such a venture, just as when you look at me you do not see me."

"But . . . I'm looking directly at you. Of course I see you!" She glared at him. His words reflected knowledge of the Zensunni Codex as she'd been taught it in the Bene Gesserit schools: play of words to confuse one's understanding of philosophy.

"Some things occur beyond your control," he said.

"How does that explain this . . . this *perfection* which is so far beyond other human experiences?"

He nodded. "If one delays old age or death by the use of melange or by that learned adjustment of fleshly balance which you Bene Gesserits so rightly fear, such a delay invokes only an illusion of control. Whether one walks rapidly through the sietch or slowly, one traverses the sietch. And that passage time is experienced internally."

"Why do you bandy words this way? I cut my wisdom teeth on such nonsense long before even your father was born."

"*But only the teeth grew,*" he said.

"Words! Words!"

"Ahhh, you're very close!"

"Hah!"

"Grandmother?"

"Yes?"

He held his silence for a long space, then: "You see? You can still respond as yourself." He smiled at her. "But you cannot see past the shadows. I am here." Again, he smiled. "My father came very near to this. When he lived, he lived, but when he died, he failed to die."

"What're you saying?"

"Show me his body!"

"Do you think this Preacher . . ."

"Possible, but even so, that is not his body."

"You've explained nothing," she accused.

"Just as I warned you."

"Then why . . ."

"You asked. You had to be shown. Now, let us return to Alia

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and her plan of abduction for . . ."

"Are you planning the unthinkable?" she demanded, holding the poisonous gom jabbar at the ready beneath her robe.

"Will you be her executioner?" he asked, his voice deceptively mild. He pointed a finger at the hand beneath her robe. "Do you think she'll permit you to use that? Or do you think I'd let you use it?"

Jessica found she could not swallow.

"In answer to your question," he said, "I do not plan the unthinkable. I am not that stupid. But I am shocked at you. You dare judge Alia. Of course she's broken the precious Bene Gesserit commandment! What'd you expect? You ran out on her, left her as queen here in all but name. All of that power! So you ran back to Caladan to nurse your wounds in Gurney's arms. Good enough. But who are you to judge Alia?"

"I tell you, I will not dis . . ."

"Oh, shut up!" He looked away from her in disgust. But his words had been uttered in that special Bene Gesserit way—the controlling *Voice*. It silenced her as though a hand had been clapped over her mouth. She thought: *Who'd know how to hit me with* Voice *better than this one?* It was a mitigating argument which eased her wounded feelings. As many times as she'd used Voice on others, she'd never expected to be susceptible to it . . . not ever again . . . not since the school days when . . .

He turned back to her. "I'm sorry. I just happen to know how blindly you can be expected to react when . . ."

"Blindly? Me?" She was more outraged by this than she'd been by his exquisite use of *Voice* against her.

"You," he said. "Blindly. If you've any honesty left in you at all, you'll recognize your own reactions. I call your name and you say, 'Yes?' I silence your tongue. I invoke all your Bene Gesserit myths. Look inward the way you were taught. That, at least, is something you can do for your . . ."

"How dare you! What do you know of . . ." Her voice trailed off. Of course he knew!

"Look inward, I say!" His voice was imperious.

Again, his voice enthralled her. She found her senses stilled, felt a quickening of breath. Just beyond awareness lurked a pounding heart, the panting of . . . Abruptly, she realized that the quickened breath, the pounding heart, were not latent, not held at bay by her Bene Gesserit control. Eyes widening in shocked awareness, she felt her own flesh obeying other commands. Slowly, she recovered her poise, but the realization remained. This *unchild* had been playing her like a fine instrument throughout their interview.

"Now you know how profoundly you were conditioned by your precious Bene Gesserits," he said.

She could only nod. Her belief in words lay shattered. Leto had forced her to look her physical universe squarely in the face, and she'd come away shaken, her mind

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running with a new awareness. *"Show me his body!"* He'd shown her her own body as though it were newborn. Not since her earliest schooling days on Wallach, not since those terrifying days before the Duke's buyers came for her, not since then had she felt such trembling uncertainty about her next moments.

"You will allow yourself to be abducted," Leto said.

"But . . ."

"I'm not asking for discussion on this point," he said. "You will allow it. Think of this as a command from your Duke. You'll see the purpose when it's done. You're going to confront a very interesting student."

Leto stood, nodded. He said: "Some actions have an end but no beginning; some begin but do not end. It all depends upon where the observer is standing." Turning, he left her chambers.

In the second anteroom, Leto met Ghanima hurrying into their private quarters. She stopped as she saw him, said: "Alia's busy with the Convocation of the Faith." She looked a question at the passage which led to Jessica's quarters.

"It worked," Leto said.

Atrocity is recognized as such by victim and perpetrator alike, by all who learn about it at whatever remove. Atrocity has no excuses, no mitigating argument. Atrocity never balances or rectifies the past. Atrocity merely arms the future for more atrocity. It is self-perpetuating upon itself—a barbarous form of incest. Whoever commits atrocity also commits those future atrocities thus bred.

—The Apocrypha of Muad'Dib

Shortly after noon when most of the pilgrims had wandered off to refresh themselves in whatever cooling shade and source of libation they could find, The Preacher entered the great square below Alia's Temple. He came on the arm of his surrogate eyes, young Assan Tariq. In a pocket beneath his flowing robe, The Preacher carried the black gauze mask he'd worn on Salusa Secundus. It amused him to think that the mask and the boy served the same purpose—disguise. While he needed surrogate eyes, doubts remained.

Let the myth grow, but keep doubts alive, he thought.

No one must discover that the mask was merely cloth, not an Ixian artifact at all. His hand must not slip from Assan Tariq's bony shoulder. Let The Preacher once walk as the sighted despite his eyeless sockets, and all doubts would dissolve. The small hope he nursed would be dead. Each day, he prayed for a change, something different over which he might stumble, but even Salusa Secundus had been but a pebble, every aspect known. Nothing changed; nothing could be changed . . . yet.

Many people marked his passage past the shops and arcades, noting the way he turned his head from side to side, holding it centered on a doorway or a person. The movements of his head were not always blind-natural, and this added to the growing myth.

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Alia watched from a concealed slit in the towering battlement of her temple. She searched that scarred visage far below for some sign—a sure sign of identity. Every rumor was reported to her. Each new one came with its thrill of fear.

She'd thought her order to take The Preacher captive would remain secret, but that, too, came back to her now as a rumor. Even among her guards, someone could not remain silent. She hoped now that the guards would follow her new orders and not take this robed mystery captive in a public place where it could be seen and reported.

It was dusty hot in the square. The Preacher's young guide had pulled the veil of his robe up around his nose, leaving only the dark eyes and a thin patch of forehead exposed. The veil bulged with the outline of a stillsuit's catchtube. This told Alia that they'd come in from the desert. Where did they hide out there?

The Preacher wore no veil protection from the searing air. He had even dropped the catchtube flap of his stillsuit. His face lay open to the sunlight and the heat shiverings which lifted off the square's paving blocks in visible waves.

At the Temple steps there stood a group of nine pilgrims making their departure obeisance. The shadowed edge of the square held perhaps fifty more persons, mostly pilgrims devoting themselves to various penances imposed by the priesthood. Among the onlookers could be seen messengers and a few merchants who'd not yet made enough sales to close up for the worst of the day's heat.

Watching from the open slit, Alia felt the drenching heat and knew herself to be caught between thinking and sensation, the way she'd often seen her brother caught. The temptation to consult within herself rang like an ominous humming in her head. The Baron was there: dutiful, but always ready to play upon her terrors when rational judgment failed and the things around her lost their sense of past, present and future.

What if that's Paul down there? she asked herself.

"Nonsense!" the voice within her said.

But the reports of The Preacher's words could not be doubted. *Heresy!* It terrified her to think that Paul himself might bring down the structure built on his name.

Why not?

She thought of what she'd said in Council just that morning, turning viciously upon Irulan who'd urged acceptance of the gift of clothing from House Corrino.

"All gifts to the twins will be examined thoroughly, just as always," Irulan had argued.

"And when we find the gift harmless?" Alia had cried.

Somehow, that had been the most frightening thing of all: to find the gift carried no threat.

In the end, they'd accepted the fine clothing and had gone on to the other issue: Was the Lady Jessica to be given a position on the Council? Alia had managed to delay a vote.

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She thought of this as she stared down at The Preacher.

Things which happened to her Regency now were like the underside of that transformation they inflicted upon this planet. Dune had once symbolized the power of ultimate desert. That power dwindled physically, but the myth of its power grew apace. Only the ocean-desert remained, the great Mother Desert of the inner planet with its rim of thorn bushes which Fremen still called Queen of Night. Behind the thorn bushes arose soft green hills bending down the sand. All of the hills were man-made. Every last one of them had been planted by men who'd labored like crawling insects. The green of those hills was almost overpowering to someone raised as Alia had been in the tradition of dun-shaded sand. In her mind, as in the minds of all Fremen, the ocean-desert still held Dune in a grip which would never relax. She had only to close her eyes and she would see that desert.

Open eyes at the desert edge saw now the verdant hills, marsh slime reaching out green pseudopods toward the sand—but the other desert remained as powerful as ever.

Alia shook her head, stared down at The Preacher.

He had mounted the first of the terraced steps below the Temple and turned to face the almost deserted square. Alia touched the button beside her window which would amplify voices from below. She felt a wave of self-pity, seeing herself held here in loneliness. Who could she trust? She'd thought Stilgar remained reliable, but Stilgar had been infected by this blind man.

"You know how he counts?" Stilgar had asked her. "I heard him counting coins as he paid his guide. It's very strange to my Fremen ears, and that's a terrible thing. He counts 'shuc, ishcai, qimsa, chuascu, picha, sucta' and so on. I've not heard counting like that since the old days in the desert."

From this, Alia knew that Stilgar could not be sent to do the job which must be done. And she would have to be circumspect with her guards where the slightest emphasis from the Regency tended to be taken as absolute command.

What was he doing down there, this Preacher?

The surrounding marketplace beneath its protective balconies and arched arcade still presented a gaudy face: merchandise left on display with a few boys to watch over it. Some few merchants remained awake there sniffing for the spice-biscuit money of the back country or the jingle in a pilgrim's purse.

Alia studied The Preacher's back. He appeared poised for speech, but something withheld his voice.

Why do I stand here watching that ruin in ancient flesh? she asked herself. *That mortal wreckage down there cannot be the "vessel of magnificence" which once was my brother.*

Frustration bordering on anger filled her. How could she find out about The Preacher, find out for certain *without finding out?* She was trapped. She dared not reveal more

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than a passing curiosity about this heretic.

Irulan felt it. She'd lost her famous Bene Gesserit poise and screamed in Council: "We've lost the power to think well of ourselves!"

Even Stilgar had been shocked.

Javid had brought them back to their senses: "We don't have time for such nonsense!"

Javid was right. What did it matter how they thought of themselves? All that concerned them was holding onto the Imperial power.

But Irulan, recovering her poise, had been even more devastating: "We've lost something vital, I tell you. When we lost it, we lost the ability to make good decisions. We fall upon decisions these days the way we fall upon an enemy—or we wait and wait, which is a form of giving up, and we allow the decisions of others to move us. Have we forgotten that we were the ones who set this current flowing?"

And all over the question of whether to accept a gift from House Corrino.

Irulan will have to be disposed of. Alia decided.

What was that old man down there waiting for? He called himself a preacher. Why didn't he preach?

Irulan was wrong about our decision-making, Alia told herself. *I can still make proper decisions!* The person with life and death decisions to make must make decisions or remain caught in the pendulum. Paul had always said that stasis was the most dangerous of those things which were not natural. The only permanence was fluid. Change was all that mattered.

I'll show them change! Alia thought.

The Preacher raised his arms in benediction.

A few of those remaining in the square moved closer to him, and Alia noted the slowness of that movement. Yes, the rumors were out that The Preacher had aroused Alia's displeasure. She bent closer to the Ixian speaker beside her spy hole. The speaker brought her the murmurings of the people in the square, the sound of wind, the scratching of feet on sand.

"I bring you four messages!" The Preacher said.

His voice blared from Alia's speaker, and she turned down the volume.

"Each message is for a certain person." The Preacher said. "The first message is for Alia, the suzerain of this place." He pointed behind him toward her spy hole. "I bring her a warning: You, who held the secret of duration in your loins, have sold your future for an empty purse!"

How dare he? Alia thought. But his words froze her.

"My second message," The Preacher said, "is for Stilgar, the Fremen Naib, who believes he can translate the power of the tribes into the power of the Imperium. My warning to you, Stilgar: The most dangerous of all creations is a rigid code of ethics. It will turn upon you and drive you into exile!"

He has gone too far! Alia

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thought. *I must send the guards for him no matter the consequences.* But her hands remained at her sides.

The Preacher turned to face the Temple, climbed to the second step and once more whirled to face the square, all the time keeping his left hand upon the shoulder of his guide. He called out now: "My third message is for the Princess Irulan. Princess! Humiliation is a thing which no person can forget. I warn you to flee!"

What's he saying? Alia asked herself. *We humilated Irulan, but . . . Why does he warn her to flee? My decision was just made!* A thrill of fear shot through Alia. How did The Preacher know?

"My fourth message is for Duncan Idaho," he shouted. "Duncan! You were taught to believe that loyalty buys loyalty. Ohh, Duncan, do not believe in history because history is impelled by whatever passes for money. Duncan! take your horns and do what you know best how to do."

Alia chewed the back of her right hand. *Horns!* She wanted to reach out and press the button which would summon guards, but her hand refused to move.

"Now, I will preach to you," The Preacher said. "This is a sermon of the desert. I direct it to the ears of Muad'Dib's priesthood, those who practice the ecumenism of the sword. Ohhh, you believers in manifest destiny! Know you not that manifest destiny has its demoniac side? You cry out that you find yourselves exalted merely to have lived in the blessed generation of Muad'Dib. I say to you that you have abandoned Muad'Dib. Holiness has replaced love in your religion! You court the vengeance of the desert!" The Preacher lowered his head as though in prayer.

Alia felt herself shivering with awareness. Gods below! That voice! It had been cracked by years in the burning sands, but it could be the remnant of Paul's voice.

Once more, The Preacher raised his head. His voice boomed out over the square where more people had begun to gather, attracted by this oddity out of the past.

"Thus it is written!" The Preacher shouted. "They who pray for dew at the desert's edge shall bring forth the deluge! They shall not escape their fate through powers of reason! Reason arises from pride that a man may not know in this way when he has done evil." He lowered his voice. "It was said of Muad'Dib that he died of prescience, that knowledge of the future killed him and he passed from the Universe of Reality into the Alam al Mythal. I say to you that this is the illusion of Maya. Such thoughts have no independent reality. They cannot go out from you and do real things. Muad'Dib said of himself that he possessed no Rihani Magic with which to encipher the universe. Do not doubt him."

Again, The Preacher raised his arms, lifted his voice in a stentorian bellow: "I warn the priesthood of Muad'Dib! The fire on the cliff shall burn you! They who learn the lesson of self-deception too well shall perish by that deception. The blood of a brother cannot be cleansed away!"

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He had lowered his arms, found his young guide and was leaving the square before Alia could break herself from the trembling immobility which had overcome her. Such fearless heresy! It must be Paul. She had to warn her guards. They dared not move against this *Preacher* openly. The evidence in the square below her confirmed this.

Despite the heresy, no one moved to stop the departing Preacher. No Temple guard leaped to pursue him. No pilgrim tried to stop him. That charismatic blind man! Everyone who saw or heard him felt his power, the reflection of divine talent.

In spite of the day's heat, Alia felt suddenly cold. She felt the thin edge of her grip on the Imperium as a physical thing. She gripped the edge of her spy hole window as though to hold her power, thinking of its fragility. The balance of Landsraad, CHOAM and Fremen arms held the core of power, while Spacing Guild and Bene Gesserit dealt silently in the shadows. The forbidden seepage of technological development which came from the edges of humankind's farthest migrations nibbled at the central power. Products permitted the Ixian and Tlielaxu factories could not relieve the pressure. And always in the wings there stood Farad'n of House Corrino, inheritor of Shaddam IV's titles and claims.

Without the Fremen, without House Atreides monopoly on the geriatric spice, her grip would loosen. All the power would dissolve. She could feel it slipping from her right now. People heeded this Preacher. It would be dangerous to silence him; just as dangerous as it was to let him continue preaching such words as he'd shouted across her square today. She could sense the thrust and parry between his words and her power. She could see the first omens of her own defeat and the pattern of the problem stood out clearly in her mind. The Bene Gesserits had codified the problem:

"A large populace held in check by a small, but powerful force is quite a common situation in our universe. And we know the major conditions wherein this large populace may turn upon its keepers—.

"One: When they find a leader. This is the most volatile threat to the powerful; they must retain control of leaders.

"Two: When the populace recognizes its chains. Keep the populace blind and unquestioning.

"Three: When the populace perceives a hope of escape from bondage. They must never even believe that escape is possible!"

Alia shook her head, feeling her cheeks tremble with the force of movement. The signs were here in her populace. Every report she received from her spies throughout the Imperium reinforced her certain knowledge. Unceasing warfare of the Fremen Jihad left its marks everywhere. Wherever "the ecumenism of the sword" had touched, people retained the attitude of a subject population: defensive, concealing, evasive. All manifestations of authority—and this meant essentially *religious* authority—became

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subject to resentment. Oh, pilgrims still came in their thronging millions, and some among them were probably devout. But for the most part, pilgrimage had other motivations than devotion. Most often it was a canny surety for the future. It emphasized obedience and gained a real form of power which was easily translated into wealth. The Hajji who returned from Arrakis came home to new authority, new social status. The Hajji could make profitable economic decisions which the planet-bound of his homeworld could not challenge.

Alia knew the popular riddle: "What do you see inside the empty purse brought home from Dune?" And the answer: "The eyes of Muad'Dib (fire diamonds)."

The traditional ways to counter growing unrest paraded themselves before Alia's awareness: people had to be taught that opposition was always punished and assistance to the ruler was always rewarded. Imperial forces must be shifted in random fashion. Major adjuncts to Imperial power had to be concealed. Every movement by which the Regency countered potential attack required delicate timing to keep the opposition off balance.

Have I lost my sense of timing? she wondered.

"What idle speculation is this?" a voice within her asked. She felt herself growing calmer. Yes, the Baron's plan was a good one. We eliminate the threat of the Lady Jessica and, at the same time, we discredit House Corrino. Yes.

The Preacher could be dealt with later. She understood his posture. The symbolism was clear. He was the ancient spirit of unbridled speculation, the spirit of heresy, alive and functioning in her desert of orthodoxy. That was his strength. It didn't matter whether he was Paul . . . as long as that could be kept in doubt. But her Bene Gesserit knowledge told Alia that his strength would contain the key to his weakness.

The Preacher has a flaw which we will find. I will have him spied upon, watched every moment. And if the opportunity arises, he will be discredited.

I will not argue with the Fremen claim that they are divinely inspired to transmit a religious revelation. It is their concurrent claim to ideological revelation which inspires *me* to shower them with derision. Of course, they make the dual claim in the hope that it will strengthen their mandarinate and help them to endure in a universe which finds them increasingly oppressive. It is in the name of all those oppressed people that I warn the Fremen: short-term expediency always fails in the long term.

—The Preacher at Arrakeen

Leto had come up in the night with Stilgar to the narrow ledge at the crest of the low rock outcropping which Sietch Tabr called The Attendant. Under the waning light of Second Moon, the ledge gave them a panoramic view—the Shield Wall with Mount Idaho to the north, the Great Flat to the south and rolling dunes eastward toward Habbanya Ridge. Winding

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dust, the aftermath of a storm, hid the southern horizon. Moonlight frosted the rim of the Shield Wall.

Stilgar had come against his will, joining the secretive venture finally because Leto aroused his curiosity. Why was it necessary to risk a sand crossing in the night? The lad had threatened to sneak away and make the journey alone if Stilgar refused. The way of it bothered him profoundly. Two such important targets alone in the night!

Leto squatted on the ledge facing south toward the flat. Occasionally, he pounded his knee as though in frustration.

Stilgar waited. He was good at silent waiting, and stood two paces to one side of his charge, arms folded, his robe moving softly in the night breeze.

For Leto, the sand crossing represented a response to inner desperation, a need to seek a new alignment for his life in a silent conflict which Ghanima could no longer risk. He had maneuvered Stilgar into sharing the journey because there were things Stilgar had to know in preparation for the days ahead.

Again, Leto pounded his knee. It was difficult to know a beginning! He felt, at times, like an extension of those countless other lives, all as real and immediate as his own. In the flow of those lives there was no ending, no accomplishment—only eternal beginning. They could be a mob, too, clamoring at him as though he were a single window through which each desired to peer. And there lay the peril which had destroyed Alia.

Leto stared outward at the moonlight silvering the storm remnants. Folds and overfolds of dunes spread across the flat: silica grit measured out by the winds, mounded into waves—pea sand, grit sand, pebbles. He felt himself caught in one of those poised moments just before dawn. Time pressed at him. It was already the month of Akkad and behind him lay the last of an interminable waiting time: long hot days and hot dry winds, nights like this one tormented by gusts and endless blowings from the furnace lands of the Hawkbled. He glanced over his shoulder toward the Shield Wall, a broken line in starlight. Beyond that wall in the Northern Sink lay the focus of his problems.

Once more, he looked to the desert. As he stared into the hot darkness, day dawned, the sun rising out of dust scarves and placing a touch of lime into the storm's red streamers. He closed his eyes, willing himself to see how this day would appear from Arrakeen, and the city lay there in his consciousness, caught up like a scattering of boxes between the light and the new shadows. Desert . . . boxes . . . desert . . . boxes . . .

When he opened his eyes, the desert remained: a spreading curry expanse of wind-kicked sand. Oily shadows along the base of each dune reached out like rays of the night just past. They linked one time with the other. He thought of the night, squatting here with Stilgar restless beside him, worried at the silence and the unexplained reasons for coming to this place.

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Stilgar must have many memories of passing this way with his beloved Muad'Dib. Even now, Stilgar was moving, scanning all around, alert for dangers. Stilgar did not like the open in daylight. He was pure old Fremen in that.

Leto's mind was reluctant to leave the night and the clean exertions of a sand crossing. Once here in the rocks, the night had taken on its black stillness. He sympathized with Stilgar's daylight fears. Black was a single thing even when it contained boiling terrors. Light could be many things. Night held its fear smells and its things which came with slithering sounds. Dimensions separated in the night, everything amplified—thorns sharper, blades more cutting. But terrors of the day could be worse.

Stilgar cleared his throat.

Leto spoke without turning: "I have a very serious problem, Stil."

"So I surmised." The voice beside Leto came low and wary. The child had sounded disturbingly of the father. It was a thing of forbidden magic which touched a cord of revulsion in Stilgar. Fremen knew the terrors of *possession*. Those found possessed were rightfully killed and their water cast upon the sand lest it contaminate the tribal cistern. The dead should remain dead. It was correct to find one's immortality in children, but children had no right to assume too exact a shape from their past.

"My problem is that my father left so many things undone," Leto said. "Especially the focus of our lives. The Empire cannot go on this way, Stil, without a proper focus for human life. I am speaking of life, you understand? Life, not death."

"Once, when he was troubled by a vision, your father spoke in this vein to me," Stilgar said.

Leto found himself tempted to pass off that questioning fear beside him with a light response, perhaps a suggestion that they break their fast. He realized that he was very hungry. They had eaten the previous noon and Leto had insisted on fasting through the night. But another hunger drew him now.

The trouble with my life is the trouble with this place, Leto thought. *No preliminary creation. I just go back and back and back until distances fade away. I cannot see the horizon; I cannot see Habbanya Ridge. I can't find the original place of testing.*

"There's really no substitute for prescience," Leto said. "Perhaps I should risk the spice . . ."

"And be destroyed as your father was?"

"A dilemma," Leto said.

"Once, your father confided in me that knowing the future too well was to be locked into that future to the exclusion of any freedom to change."

"The paradox which is our problem," Leto said. "It's a subtle and powerful thing, prescience. The future becomes now. To be sighted in the land of the blind carries its own perils. If you try to interpret what you see for the blind, you tend to forget that the blind possess an inherent movement conditioned by their blindness. They are like a monstrous machine moving along

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its own path. They have their own momentum, their own fixations. I fear the blind, Stil. I fear them. They can so easily crush anything in their path."

Stilgar stared at the desert. Lime dawn had become steel day. He said: "Why have we come to this place?"

"Because I wanted you to see the place where I may die."

Stilgar tensed, then: "So you *have* had a vision!"

"Perhaps it was only a dream."

"Why do we come to such a dangerous place?" Stilgar glared down at his charge. "We will return at once."

"I won't die today, Stil."

"No? What was this vision?"

"I saw three paths," Leto said. His voice came out with the sleepy sound of remembrance. "One of those futures requires me to kill our grandmother."

Stilgar shot a sharp glance back toward Sietch Tabr, as though he feared the Lady Jessica could hear them across the sandy distance. "Why?"

"To keep from losing the spice monopoly."

"I don't understand."

"Nor do I. But that is the thought of my dream when I use the knife."

"Oh." Stilgar understood the use of a knife. He drew a deep breath. "What is the second path?"

"Ghani and I marry to seal the Atreides bloodline."

"Ghaaa!" Stilgar expelled his breath in a violent expression of distaste.

"It was usual in ancient times for Kings and Queens to do this," Leto said. "Ghani and I have decided we will not breed."

"I warn you to hold fast in that decision!" There was death in Stilgar's voice. By Fremen law, incest was punishable by death on the hanging tripod. He cleared his throat, asked: "And the third path?"

"I am called to reduce my father to human stature."

"He was my friend, Muad'Dib," Stilgar muttered.

"He was your god! I must undeify him."

Stilgar turned his back on the desert, stared toward the oasis of his beloved Sietch Tabr. Such talk always disturbed him.

Leto sensed the sweaty smell of Stilgar's movement. It was such a temptation to avoid the purposeful things which had to be said here. They could talk half the day away, moving from the specific to the abstract as though drawn away from real decisions, from those immediate necessities which confronted them. And there was no doubt that House Corrino posed a real threat to real lives—his own and Ghani's. But everything he did now had to be weighed and tested against the secret necessities. Stilgar once had voted to have Farad'n assassinated, holding out for the subtle application of chaumurky: poison administered in a drink. Farad'n was known to be partial to certain sweet liqueurs. That could not be permitted.

"If I die here, Stil," Leto said, "you must beware of Alia. She is no longer your friend."

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"What is this talk of death and your aunt?" Now, Stilgar was truly outraged. *Kill the Lady Jessica! Beware of Alia! Die in this place!*

"Small men change their faces at her command," Leto said. "A ruler need not be a prophet, Stil. Nor even godlike. A ruler need only be sensitive. I brought you here with me to clarify what our Imperium requires. It requires good government. That does not depend upon laws or precedent, but upon the personal qualities of whoever governs."

"The Regency handles its Imperial duties quite well," Stilgar said. "When you come of age . . ."

"I *am* of age! I'm the oldest person here! You're a puling infant beside me. I can remember times more than fifty centuries past. Hah! I can even remember when we Fremen were on Thurgrod."

"Why do you play with such fancies?" Stilgar demanded, his tone peremptory.

Leto nodded to himself. Why indeed? Why recount his memories of those other centuries? Today's Fremen were his immediate problem, most of them still only half-tamed savages, prone to laugh at unlucky innocence.

"The crysknife dissolves at the death of its owner," Leto said. "Muad'Dib has dissolved. Why are the Fremen still alive?"

It was one of those abrupt thought changes which so confounded Stilgar. He found himself temporarily dumb. Such words contained meaning, but their intent eluded him.

"I am expected to be Emperor, but I must be the servant," Leto said. He glanced across his shoulder at Stilgar. "My grandfather for whom I was named added new words to his coat of arms when he came here to Dune: 'Here I am; here I remain.' "

"He had no choice," Stilgar said.

"Very good, Stil. Nor have I any choice. I should be the Emperor by birth, by the fitness of my understanding, by all that has gone into me. I even know what the Imperium requires: good government."

"Naib has an ancient meaning," Stilgar said. "It is 'Servant of the Sietch.' "

"I remember your training, Stil," Leto said. "For proper government, the tribe must have ways to choose men whose lives reflect the way a government should behave."

From the depths of his Fremen soul, Stilgar said: "You'll assume the Imperial Mantle if it's mete. First, you must prove that you can behave in the fashion of a ruler!"

Unexpectedly, Leto laughed. "Do you doubt my sincerity, Stil?"

"Of course not."

"My birthright?"

"You are who you are."

"And if I do what is expected of me, that is the measure of my sincerity, eh?"

"It is the Fremen practice."

"Then I cannot have inner feelings to guide my behavior?"

"I don't understand what . . ."

"If I always behave with propriety, no matter what it costs me to suppress my own desires, then that is the measure of me."

"Such is the essence of self-control, youngster."

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"Youngster!" Leto shook his head. "Ahhh, Stil, you provide me with the key to a rational ethic of government. I must be constant, every action rooted in the traditions of the past."

"That is proper."

"But my past goes deeper than yours!"

"What difference . . ."

"I have no first person singular, Stil. I am a multiple person with memories of traditions more ancient than you could imagine. That's my burden, Stil. I'm past-directed. I'm abrim with innate knowledge which resists newness and change. Yet, Muad'Dib changed all this." He gestured at the desert, his arm sweeping to encompass the Shield Wall behind him.

Stilgar turned to peer at the Shield Wall. A village had been built beneath the wall since Muad'Dib's time, houses to shelter a planetology crew helping spread plant life into the desert. Stilgar stared at the man-made intrusion into the landscape. Change? Yes. There was an alignment to the village, a trueness which offended him. He stood silently, ignoring the itching of grit particles under his stillsuit. That village was an offense against the thing this planet had been. Suddenly, Stilgar wanted a circular howling of wind to leap over the dunes and obliterate that place. The sensation left him trembling.

Leto said: "Have you noticed, Stil, that the new stillsuits are of sloppy manufacture? Our water loss is too high."

Stilgar stopped himself on the point of asking: *Have I not said it?* Instead, he said: "Our people grow increasingly dependent upon the pills."

Leto nodded. The pills shifted body temperature, reduced water loss. They were cheaper and easier than stillsuits. But they inflicted the user with other burdens, among them a tendency to slowed reaction time, occasional blurred vision.

"Is that why we came out here?" Stilgar asked. "To discuss stillsuit manufacture?"

"Why not?" Leto asked. "Since you will not face what I must talk about."

"Why must I beware of your aunt?" Anger edged his voice.

"Because she plays upon the old Fremen desire to resist change, yet would bring more terrible change than you can imagine."

"You make much out of little! She's a proper Fremen."

"Ahhh, then the proper Fremen holds to the ways of the past and I have an ancient past. Stil, were I to give free reign to this inclination, I would demand a closed society, completely dependent upon the sacred ways of the past. I would control migration, explaining that this fosters new ideas, and new ideas are a threat to the entire structure of life. Each little planetary polis would go its own way, becoming what it would. Finally, the Empire would shatter under the weight of its differences."

Stilgar tried to swallow in a dry throat. These were words which Muad'Dib might have produced. They had his ring to them. They

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were paradox, frightening. But if one allowed any change . . . He shook his head.

"The past may show the right way to behave if you live in the past, Stil, but circumstances change."

Stilgar could only agree that circumstances did change. How must one behave then? He looked beyond Leto, seeing the desert and not seeing it. Muad'Dib had walked there. The flat was a place of golden shadows as the sun climbed, purple shadows, gritty rivulets crested in dust vapors. The dust fog which usually hung over Habbanya Ridge was visible in the far distance now, and the desert between presented his eyes with dunes diminishing, one curve into another. Through the smoky shimmer of heat, he saw the plants which crept out from the desert edge. Muad'Dib had caused life to sprout in that desolate place. Copper, gold, red flowers, yellow flowers, rust and russet, gray-green leaves, spikes and harsh shadows beneath bushes. The motion of the day's heat set shadows quivering, vibrating the air.

Presently, Stilgar said: "I am only a leader of Fremen; you are the son of a Duke."

"Not knowing what you said, you said it," Leto said.

Stilgar scowled. Once long ago, Muad'Dib had chided him thus.

"You remember it, don't you, Stil?" Leto asked. "We were under Habbanya Ridge and the Sardaukar captain—remember him: Aramsham? He killed his friend to save himself. And you warned several times that day about preserving the lives of Sardaukar who'd seen our secret ways. Finally, you said they would surely reveal what they'd seen; they must be killed. And my father said: 'Not knowing what you said, you said it.' And you were hurt. You told him you were only a *simple* leader of Fremen. Dukes must know more important things."

Stilgar stared down at Leto. *We were under Habbanya Ridge! We!* This . . . this child, not even conceived on that day, knew what had taken place in exact detail, the kind of detail which could only be known to someone who had been there. It was only another proof that these Atreides children could not be judged by ordinary standards.

"Now, you will listen to me," Leto said. "If I die or disappear in the desert, you are to flee from Sietch Tabr. I command it. You are to take Ghani and . . ."

"You are not yet my Duke! You're a . . . a child!"

"I'm an adult in a child's flesh," Leto said. He pointed down to a narrow crack in the rocks below them. "If I die here, it will be in that place. You will see the blood. You will know then. Take my sister and . . ."

"I'm doubling your guard," Stilgar said. "You're not coming out here again. We are leaving now and you . . ."

"Stil! You cannot hold me. Turn your mind once more to that time at Habbanya Ridge. Remember? The factory crawler was out there on the sand and a big Maker was coming. There was no way to save

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the crawler from the worm. And my father was annoyed that he couldn't save that crawler. But Gurney could think only of the men he'd lost in the sand. Remember what he said: 'Your father would've been more concerned for the men he couldn't save.' Stil, I charge you to save people. They're more important than things. And Ghani is the most precious of all because, without me, she is the only hope for the Atreides."

"I will hear no more," Stilgar said. He turned and began climbing down the rocks toward the oasis across the sand. He heard Leto following. Presently, Leto passed him and, glancing back, said:

"Have you noticed, Stil, how beautiful the young women are this year?"

The life of a single human, as the life of a family or an entire people, persists as memory. My people must come to see this as part of their maturing process. They are people as *organism*, and in this persistent memory they store more and more experiences in a subliminal reservoir. Humankind hopes to call upon this material if it is needed for a changing universe. But much that is stored can be lost in that chance play of accident which we call "fate." Much may not be integrated into evolutionary relationships, and thus may not be evaluated and keyed into activity by those ongoing environmental changes which inflict themselves upon flesh. The *species* can forget! This is the special value of the Kwisatz Haderach which the Bene Gesserits never suspected: The Kwisatz Haderach cannot forget.

—The Book of Leto
After Harq al-Ada

Stilgar could not explain it, but he found Leto's casual statement profoundly disturbing. It ground through his awareness all the way back across the sand to Sietch Tabr, taking precedence over everything else Leto had said out there on The Attendant.

Indeed, the young women of Arrakis were very beautiful that year. And the young men, too. Their faces glowed serenely with water richness. Their eyes looked outward and far. They exposed their features often without any pretense of stillsuit masks and the snaking lines of catchtubes. Frequently, they did not even wear stillsuits in the open, preferring the new garments which, as they moved, offered flickering suggestions of the lithe young bodies beneath.

Such human beauty was set off against the new beauty of the landscape. By contrast with the old Arrakis, the eye could be spellbound by its collision with a tiny clump of green twigs growing among red-brown rocks. And the old sietch warrens of the cave-metropolis culture, complete with elaborate seals and moisture traps at every entrance, was giving way to open villages built often of mud bricks. Mud bricks!

Why did I want that village destroyed? Stilgar wondered and he stumbled as he walked.

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He knew himself to be of a dying breed. Old Fremen gasped in wonder at the prodigality of their planet—water wasted into the air for no more than its ability to mould building bricks. The water for a single one-family dwelling would keep an entire sietch alive for a year.

The new buildings even had transparent windows to let in the sun's heat and to desiccate the bodies within. Such windows opened outward.

New Fremen within their mud homes could look out upon their landscape. They no longer were enclosed and huddling in a sietch. Where the new vision moved, there also moved the imagination. Stilgar could feel this. The new vision joined Fremen to the rest of the Imperial universe, conditioned them to unbounded space. Once, they'd been tied to water-poor Arrakis by their enslavement to its bitter necessities. They'd not shared that open-mindedness which conditioned inhabitants on most planets of the Imperium.

Stilgar could see the changes contrasting with his own doubts and fears. In the old days, it'd been a rare Fremen who even considered the possibility that he might leave Arrakis to begin a new life on one of the water-rich worlds. They'd not even been permitted the *dream* of escape.

He watched Leto's moving back as the youth walked ahead. Leto had spoken of prohibitions against movement off-planet. Well, that'd always been a reality for most other-worlders, even where the dream was permitted as a safety valve. But planetary serfdom had reached its peak here on Arrakis. Fremen had turned inward, barricaded in their minds as they were barricaded in their cave warrens.

The very meaning of sietch—a place of sanctuary in times of trouble—had been perverted here into a monstrous confinement for an entire population.

Leto spoke the truth: Muad'Dib changed all that.

Stilgar felt lost. He could feel his old beliefs crumbling. The new outward vision produced life which desired to move away from containment.

"How beautiful the young women are this year."

The old ways (*My ways!* he admitted) forced us to ignore all of history except that which turned inward onto our own travail. The old Fremen read history out of their own terrible migrations, their flights from persecution into persecution. The old planetary government had followed the stated policy of the old Imperium. They had suppressed creativity and all sense of progress, of evolution. Prosperity had been dangerous to the old Imperium and its holders of power.

With an abrupt shock, Stilgar realized that these things were equally dangerous to the course which Alia was setting.

Again, Stilgar stumbled and fell farther behind Leto.

In the old ways and old religions, there'd been no future, only an endless *now*. Before Muad'Dib, Stilgar saw, the Fremen had been conditioned to believe in failure,

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never in the possibility of accomplishment. Well . . . they'd believed Liet-Kynes, but he'd set a forty-generation timescale. That was no accomplishment; that was a dream which, he saw now, had also turned inward.

Muad'Dib changed that!

During the Jihad, Fremen had learned much about the old Padishah Emperor, Shaddam IV. The eighty-first Padishah of House Corrino to occupy the Golden Lion throne and reign over this Imperium of uncounted worlds, had used Arrakis as a testing place for those policies which he'd hoped to implement in the rest of his empire. His planetary governors on Arrakis had cultivated a persistent pessimism to bolster their power base. They'd made sure that everyone on Arrakis, even the free-roaming Fremen, became familiar with numerous cases of injustice and insoluble problems, of helpless people for whom there was no succor.

"How beautiful the young women are this year!"

As he watched Leto's retreating back, Stilgar began to wonder how the youth had set these thoughts flowing . . . and just by uttering a seemingly simple statement. Because of that statement, Stilgar found himself viewing Alia and his own role on the Council in an entirely different way.

Alia was fond of saying that old ways gave ground slowly. Stilgar admitted to himself that he'd always found this statement vaguely reassuring. Change was dangerous. Invention must be suppressed. Individual willpower must be denied. What other function did the priesthood serve than to deny individual will?

Alia kept saying that opportunities for open competition had to be reduced to manageable limits. But that meant the recurrent threat of technology could only be used to confine populations—just as it had served its ancient masters. Any permitted technology had to be rooted in ritual. Otherwise . . . otherwise . . .

Again, Stilgar stumbled. He was at the ganat now and saw Leto waiting beneath the apricot orchard which grew along the flowing water. Stilgar heard his feet moving through uncut grass.

Uncut grass!

What can I believe? Stilgar asked himself.

It was proper for a Fremen of his generation to believe that individuals needed a profound sense of their own limitations. Traditions were surely the most controlling element in a secure society. People had to know the boundaries of their time, of their society, of their territory. What was wrong with the sietch as a model for all thinking? A sense of enclosure should pervade every individual choice—should fence in the family, the community and every step taken by a proper government.

Stilgar came to a stop and stared across the orchard at Leto. The youth stood there, regarding him with a smile.

Does he know the turmoil in my head? Stilgar wondered.

And the old Fremen Naib tried

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to fall back on the traditional catechism of his people. Each aspect of life required a single form, its inherent circularity based on secret inner knowledge of what will work and what will not work. The model for life, for the community, for every element of the larger society right up to and beyond the peaks of government—that model had to be the sietch and its counterpart in the sand: Shai Hulud. The giant sandworm was surely a most formidable creature, but when threatened, it hid in the impenetrable deeps.

Change is dangerous! Stilgar told himself. Sameness and stability were the proper goals of government.

But the young men and women were beautiful.

And they remembered the words of Muad'd'Dib as he deposed Shaddam IV: "It's not long life to the Emperor that I seek; it's long life to the Imperium."

Isn't that what I've been saying to myself? Stilgar wondered.

He resumed walking, headed toward the Sietch entrance slightly to Leto's right. The youth moved to intercept him.

Muad'Dib said another thing, Stilgar reminded himself: *"Just as individuals are born, mature, breed and die, so do societies and civilizations and governments."*

Dangerous or not, there would be change. The beautiful young Fremen knew this. They could look outward and see it, prepare for it.

Stilgar was forced to stop. It was either that or walk right over Leto.

The youth peered up at him owlishly, said: "You see, Stil? Tradition isn't the absolute guide you thought it was."

A Fremen dies when he is too long from the desert: this we call "the water sickness."

—Stilgar, the Commentaries

"It is difficult for me, asking you to do this," Alia said. "But . . . I must insure that there's an empire for Paul's children to inherit. There's no other reason for the Regency."

Alia turned from where she was seated at a mirror completing her morning toilet. She looked at her husband, measuring how he absorbed these words. Duncan Idaho deserved careful study in these moments; there was no doubt that he'd become something far more subtle and dangerous than the one-time swordmaster of House Atreides. The outer appearance remained similar: the black goat hair over sharp dark features, but in the long years since his awakening from the *ghola* state, he had undergone an inner metamorphosis.

She wondered now, as she had wondered many times, what the *ghola* rebirth-after-death might have hidden in the secret loneliness of him. Before the Tleilaxu had worked their subtle science on him, Duncan's reactions had born clear labels for the Atreides—loyalty, fanatic adherence to the moral code of his mercenary forebears, swift to anger and swift to recover. He had been implacable in his resolve for revenge against House Harkonnen. And he had died saving Paul. But

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the Tleilaxu had bought his body from the Sardaukar and, in their regeneration vats, they had grown a zombi-katrundo: the flesh of Duncan Idaho, but none of his conscious memories. He'd been trained as a mentat and sent as a gift, a human computer for Paul, a fine tool equipped with a hypnotic compulsion to slay his owner. The flesh of Duncan Idaho had resisted that compulsion and, in the intolerable stress, his cellular past had come back to him.

Alia had decided long ago that it was dangerous to think of him as Duncan in the privacy of her thoughts. Better to think of him by his *ghola* name, Hayt. Far better. And it was essential that he get not the slightest glimpse of the old Baron Harkonnen sitting there in her mind.

Duncan saw Alia studying him, turned away. Love could not hide the changes in her, nor conceal from him the transparency of her motives. The many-faceted metal eyes which the Tleilaxu had given him were cruel in their ability to penetrate deception. They limned her now as a gloating, almost masculine figure, and he could not stand to see her thus.

"Why do you turn away?" Alia asked.

"I must think about this thing," he said. "The Lady Jessica is . . . an Atreides."

"And your loyalty is to House Atreides, not to me," Alia pouted.

"Don't put such fickle interpretations into me," he said.

Alia pursed her lips. Had she moved too rapidly?

Duncan crossed to the chambered opening which looked down on a corner of the Temple plaza. He could see pilgrims beginning to gather there, the Arrakeen traders moving in to feed on the edges like a pack of predators upon a herd of beasts. He focused on a particular group of tradesmen, spice-fiber baskets over their arms, Fremen mercenaries a pace behind them. They moved with a stolid force through the gathering throng.

"They sell pieces of etched marble," he said, pointing. "Did you know that? They set the pieces out in the desert to be etched by stormsands. Sometimes, they find interesting patterns in the stone. They call it a new art form, very popular: genuine storm-etched marble from Dune. I bought a piece of it last week—a golden tree with five tassels, lovely but very fragile."

"Don't change the subject," Alia said.

"I haven't changed the subject," he said. "It's beautiful, but it's not art. Humans create art by their own violence, by their own volition." He put his right hand on the windowsill. "The twins detest this city and I'm afraid I see their point."

"I fail to see the association," Alia said. "The abduction of my mother is not a real abduction. She will be safe as your captive."

"This city was built by the blind," he said. "Did you know that Leto and Stilgar went out from Sietch Tabr into the desert last week? They were gone the whole night."

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"It was reported to me," she said. "These baubles from the sand—would you have me prohibit their sale?"

"That'd be bad for business," he said, turning. "Do you know what Stilgar said when I asked why they went out on the sand that way? He said Leto wished to commune with the spirit of Muad'Dib."

Alia felt the sudden coldness of panic, looked in the mirror a moment to recover. Leto would not venture from the sietch at night for such nonsense. Was it a conspiracy?

Idaho put a hand over his eyes to blot out the sight of her, said: "Stilgar told me he went because he still believes in Muad'Dib."

"Of course he does!"

Idaho chuckled, a hollow sound. "He said he still believes because Muad'Dib was always for the little people."

"What did you say to that?" Alia asked, her voice betraying her fear.

Idaho dropped his hand from his eyes. "I said, 'That must make you one of the little people.'"

"Duncan! That's a dangerous game. Bait *that* Fremen Naib and you could awaken a beast to destroy us all."

"He still believes in Muad'Dib," Idaho said. "That's our protection."

"What was his reply?"

"He said he knew his own mind."

"I see."

"No . . . I don't believe you do. Things that bite have longer teeth than Stilgar's."

"I don't understand you today, Duncan. I ask you to do a very important thing, a thing vital to . . . What is all of this rambling?"

How petulant she sounded. He turned back to the chambered window. "When I was trained as a mentat . . . It is very difficult, Alia, to learn how to work your own mind. You learn first that the mind must be allowed to work itself. That's very strange. You can work your own muscles, exercise them, strengthen them, but the mind acts of itself. Sometimes, when you have learned this about the mind, it shows you things you do not want to see."

"And that's why you tried to insult Stilgar?"

"Stilgar doesn't know his own mind; he doesn't let it run free."

"Except in the spice orgy."

"Not even there. That's what makes him a Naib. To be a leader of men, he controls and limits his reactions. He does what is expected of him. Once you know this, you know Stilgar and you can measure the length of his teeth."

"That's the Fremen way," she said. "Well, Duncan, will you do it, or won't you? She must be taken and it must be made to look like the work of House Corrino."

He remained silent, weighing her tone and arguments in his mentat way. This abduction plan spoke of a coldness and a cruelty whose dimensions, thus revealed, shocked him. Risk her own mother's life for the reasons thus far produced? Alia was lying. Perhaps the whisperings about Alia and Javid were true. This thought produced an icy hardness in his stomach.

"You're the only one I can trust for this," Alia said.

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"I know that," he assured her.

She took this as acceptance, smiled at herself in the mirror.

"You know," Idaho said, "the mentat learns to look at every human as a series of relationships."

Alia did not respond. She sat, caught in a personal memory which drew a blank expression on her face. Idaho, glancing over his shoulder at her, saw the expression and shuddered. It was as though she communed with voices heard only by herself.

"Relationships," he whispered.

And he thought: *One must cast off old agonies as a snake casts off its skin—only to grow a new set and accept all of their limitations. It was the same with governments—even the Regency. Old governments can be traced like discarded molts. I must carry out this scheme, but not in the way Alia commands.*

Presently, Alia shook her shoulders, said: "Leto should not be going out like that in these times. I will reprimand him."

"Not even with Stilgar?"

"Not even with him."

She arose from her mirror, crossed to where Idaho stood by the window, put a hand on his arm.

He repressed a shiver, reduced this reaction to a mentat computation. Something in her revolted him.

Something in her.

He could not bring himself to look at her. He smelled the melange of her cosmetics, cleared his throat.

She said: "I will be busy today examining Farad'n's gifts."

"The clothing?"

"Yes. Nothing he does is what it seems. And we must remember that his Bashar, Tyekanik, is an adept of chaumurky, chaumas and all the other subtleties of royal assassination."

"The price of power," he said, pulling away from her. "But we're still mobile and Farad'n is not."

She studied his chiseled profile. Sometimes, the workings of his mind were difficult to fathom. Was he thinking only that freedom of action gave life to a military power? Well, life on Arrakis had been too secure for too long. Senses once whetted by omnipresent dangers could degenerate when not used.

"Yes," she said, "we still have the Fremen."

"Mobility," he repeated. "We cannot degenerate into infantry. That'd be foolish."

His tone annoyed her, and she said: "Farad'n will use any means to destroy us."

"Ahhh, that's it," he said. "That's a form of initiative, a mobility which we didn't have in the old days. We had a code, the code of House Atreides. We always paid our way and let the enemy be the pillagers. That restriction no longer holds, of course. We're equally mobile, House Atreides and House Corrino."

"We abduct my mother to save her from harm as much as for any other reason," Alia said. "We still live by the code!"

He looked down at her. She knew the dangers of inciting a mentat to compute. Didn't she realize what he had computed? Yet

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. . . he still loved her. He brushed a hand across his eyes. How youthful she looked. The Lady Jessica was correct: Alia gave the appearance of not having aged a day in their years together. She still possessed the soft features of her Bene Gesserit mother, but her eyes were Atreides—measuring, demanding, hawklike. And now, something possessed of cruel calculation lurked behind those eyes.

Idaho had served House Atreides for too many years not to understand the family's strengths as well as their weaknesses. But this thing in Alia, this was new. The Atreides might play a devious game against enemies, but never against friends and allies, and not at all against Family. It was ground into the Atreides manner: support your own populace to the best of your ability; show them how much better they lived under the Atreides. Demonstrate your love for your friends by the candor of your behavior with them. What Alia asked now, though, was not Atreides. He felt this with all of his body's flesh and nerve structure. He was a unit, indivisible, feeling this alien attitude in Alia.

Abruptly, his mentat sensorium clicked into full awareness and his mind leaped into the frozen trance where *Time* did not exist; only the computation existed. Alia would recognize what had happened to him, but that could not be helped. He gave himself up to the computation.

Computation: A *reflected* Lady Jessica lived out a pseudolife in Alia's awareness. He saw this as he saw the *reflected* pre-ghola Duncan Idaho which remained a constant in his own awareness. Alia had this awareness by being one of the preborn. He had it out of the Tleilaxu regeneration tanks. Yet, Alia denied that *reflection*, risked her mother's life. Therefore, Alia was not in contact with that pseudo-Jessica within. Therefore, Alia was *completely* possessed by another pseudolife to the exclusion of all others. *Possessed! Alien! Abomination!*

Mentat fashion, he accepted this, turned to other facets of his problem. All of the Atreides were on this one planet. Would House Corrino risk attack from space? His mind flashed through the review of those conventions which had ended primitive forms of warfare:

One—All planets were vulnerable to attack from space; ergo: retaliation/revenge facilities were set up off-planet by every House Major. Farad'n would know what the Atreides had not omitted this elementary precaution.

Two—Force shields were a complete defense against projectiles and explosives of nonatomic type, the basic reason why hand-to-hand conflict had reentered human combat. But infantry had its limits. House Corrino might have brought their Sardaukar back to a pre-Arrakeen edge, but they still could be no match for the abandoned ferocity of Fremen.

Three—Planetary feudalism remained in constant danger from a large technical class, but the effects of the Butlerian Jihad continued as a damper on technological excesses.

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Ixians, Tleilaxu and a few scattered outer planets were the only possible threat in this regard and they were planet-vulnerable to the combined wrath of the rest of the Imperium. The Butlerian Jihad would not be undone. Mechanized warfare required a large technical class. The Atreides Imperium had channeled this force into other pursuits. No large technical class existed unwatched. And the Empire remained safely feudalist, naturally, since that was the best social form for spreading over widely dispersed wild frontiers—new planets.

Duncan felt his mentat awareness coruscate as it shot through memory data *of itself*, completely impervious to the passage of time. Arriving at the conviction that House Corrino would not risk an *illegal* atomic attack, he did this in flash-computation, the main decisional pathway, but he was perfectly aware of the elements which went into this conviction: The Imperium commanded as many nuclear and allied weapons as all the Great Houses combined. At least half the Great Houses would react without thinking if House Corrino broke the Convention. The Atreides off-planet retaliation system would be joined by overwhelming force, and no need to summon any of them. Fear would do the calling. Salusa Secundus and its allies would vanish in hot clouds. House Corrino would not risk such a holocaust. They were undoubtedly sincere in subscribing to the argument that nuclear weapons were a reserve held for one purpose: defense of humankind should a threatening "other intelligence" ever be encountered.

The computational thoughts had clean edges, sharp relief. There were no blurred between-places. Alia chose abduction and terror because she had become alien, non-Atreides. House Corrino was a threat, but not in the ways which Alia argued in Council. Alia wanted the Lady Jessica removed because that searing Bene Gesserit intelligence had seen seen what only now had become clear to him.

Idaho shook himself out of the mentat trance, saw Alia standing in front of him, a coldly measuring expression on her face.

"Wouldn't you rather the Lady Jessica were killed?" he asked.

The alien-flash of her joy lay exposed before his eyes for a brief instant before being covered by false outrage. "Duncan!"

Yes, this alien-Alia preferred matricide.

"You are afraid *of* your mother, not *for* her," he said.

She spoke without a change in her measuring stare. "Of course I am. She has reported about me to the Sisterhood."

"What do you mean?"

"Don't you know the greatest temptation for a Bene Gesserit?" She moved closer to him, seductive, looked upward at him through her lashes. "I thought only to keep myself strong and alert for the sake of the twins."

"You speak of temptation," he said, his voice mentat-flat.

"It's the thing which the Sisterhood hides most deeply, the thing they most fear. It's why they call

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me *Abomination.* They know their inhibitions won't hold me back. Temptation—they always speak with heavy emphasis: *Great Temptation.* You see, we who employ the Bene Gesserit teachings can influence such things as the internal adjustment of enzyme balance for our bodies. It can prolong youth—far longer than with melange. Do you see the consequences should many Bene Gesserits do this? It would be noticed. I'm sure you compute the accuracy of what I'm saying. Melange is what makes us the target for so many plots. We control a substance which prolongs life. What if it became known that Bene Gesserits controlled an even more potent secret? You see! Not one Reverend Mother would be safe. Abduction and torture of Bene Gesserits would become a most common activity."

"You've accomplished this enzyme balancing." It was a statement, not a question.

"I've defied the Sisterhood! My mother's reports to the Sisterhood will make the Bene Gesserits unswerving allies of House Corrino."

How very plausible, he thought.

He tested: "Surely your own mother would not turn against you!"

"She was Bene Gesserit long before she was my mother. Duncan, she permitted her own son, my brother, to undergo the test of the *gom jabbar!* She arranged it! And she knew he might not survive it! Bene Gesserits have always been short on faith and long on pragmatism. She'll act against me if she believes it's in the best interests of the Sisterhood."

He nodded. How convincing she was. It was a sad thought.

"We must hold the initiative," she said. "That's our sharpest weapon."

"There's the problem of Gurney Halleck," he said. "Do I have to kill my old friend?"

"Gurney's off on some spy errand in the desert," she said, knowing Idaho already was aware of this. "He's safely out of the way."

"Very odd," he said, "the Regent Governor of Caladan running errands here on Arrakis."

"Why not?" Alia demanded. "He's her lover . . . in his dreams if not in fact."

"Yes, of course." And he wondered that she did not hear the insincerity in his voice.

"When will you abduct her?"

"It's better that you don't know."

"Yes . . . yes, I see. Where'll you take her?"

"Where she cannot be found. Depend upon it; she won't be left here to threaten you."

The glee in Alia's eyes could not be mistaken. "But where will . . ."

"If you do not know, then you can answer before a Truthsayer, if necessary, that you do not know where she is."

"Ahhh, clever, Duncan."

Now, she believes I will kill the Lady Jessica, he thought. And he said: "Good-bye, beloved."

She did not hear the finality in his voice, even kissed him as he left.

And all the way down through the sietchlike maze of Temple corridors, Idaho brushed at his eyes. Tleilaxu eyes were not immune to tears. TO BE CONTINUED

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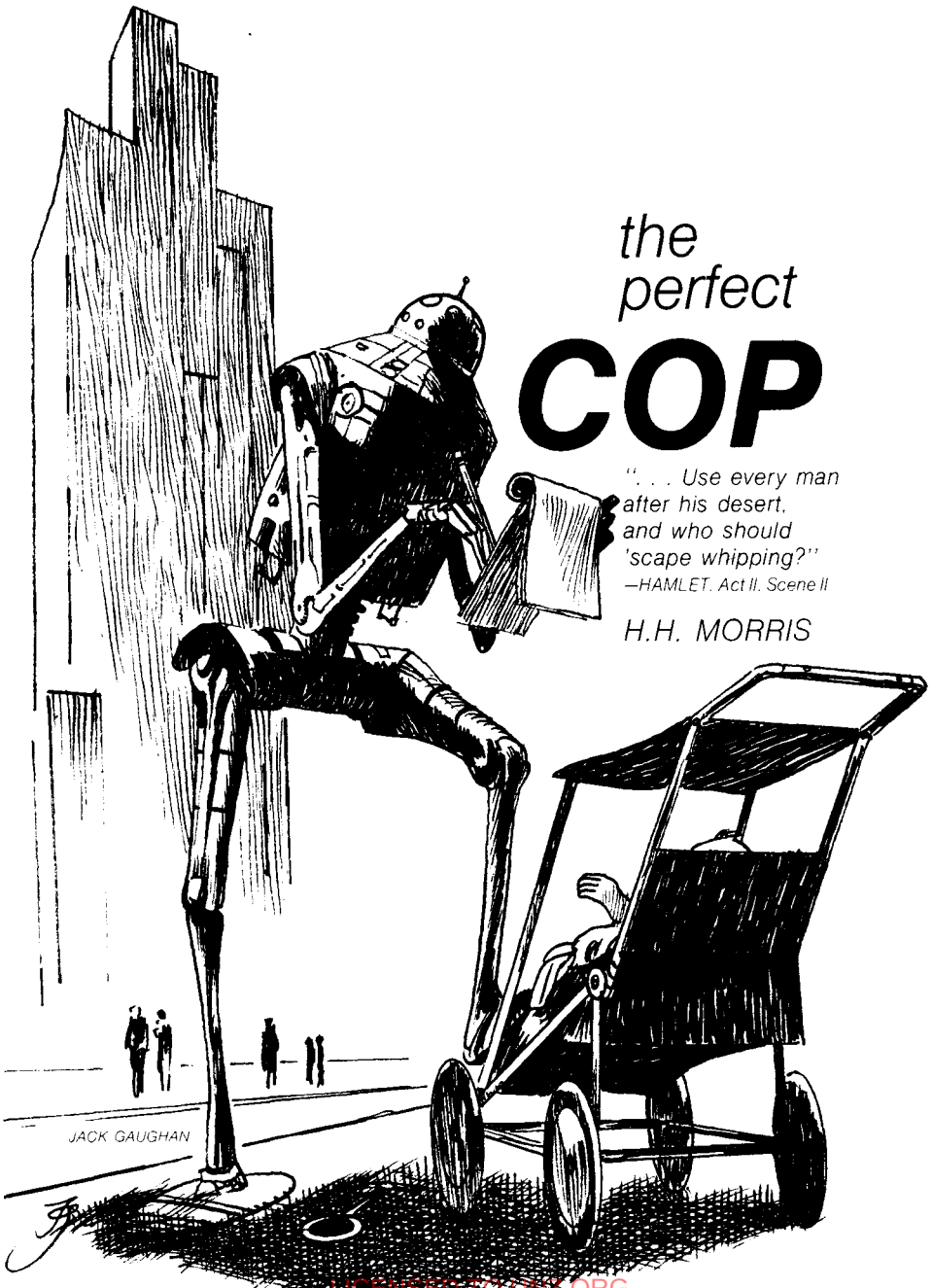

the perfect COP

". . . Use every man after his desert, and who should 'scape whipping?"
—HAMLET, Act II, Scene II

H.H. MORRIS

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Lieutenant Clancy Phillips jumped from telemonitor to telemonitor so that he could personally send the patrol copters and turbocars out to collect the suspects arrested by Detectives Alpha Humintec, Bravo Humintec, and Charley Humintec. It was the wildest night in precinct history.

"This time we have a device that fights crime instead of cops," Phillips told the communications technicians. "The days of coddling criminals are over."

Precinct seven, District three, Megapolitan Force Division XIV, had only one problem—whether to request additional manpower from other precincts to wipe out the backlog of unbooked suspects. The normal three to five minute interval from arrest to booking was too long for the arrest rate established by the three new detectives.

A young policewoman entered the communications room and said, "Lieutenant Phillips, a lawyer wants to see you."

"He can wait," Phillips said.

"It's Cantrell."

"Damn Cantrell!"

The policewoman backed away. "I'm sorry, sir," she said.

"It isn't your fault," Phillips told her. "Doesn't Cantrell realize how busy we are? These new Humintecs have more than quadrupled our arrest rate."

"That's why he's here, sir. He keeps muttering about mechanical monsters."

Phillips turned to a junior officer and said, "Sergeant Ellis, keep the incoming prisoners moving. I'll go see the complaint department."

Phillips took a back route to his small office, dialed two cups of black coffee, and asked the receptionist to send Cantrell in. The old man was angry, Phillips saw—so angry that he had only carelessly combed his white hair.

"Good evening, Mr. Cantrell," Phillips said. "What are you doing here at two in the morning?"

Cantrell took the proffered coffee, sat down, and said, "You know why I'm here, Lieutenant."

"To complain. This is the busiest night in our history. I'm sure someone has cried police brutality."

"Phillips, I want those damnable machines off the street. Immediately."

"No," Phillips said. "Give us one week with three Humintecs and the streets will be safe for honest citizens. That will be the first time since this district was originally incorporated as the City of Baltimore in 1745."

"The streets will be empty, if you let those robots define honest citizens," Cantrell said.

"What do you mean?"

"Your new toys split hairs. They have the entire criminal code memorized."

Phillips said, "That's why they're so valuable. Unlike a human policeman, they're completely objective and infallible. There's no way anyone can charge them with harassment. Hell! They're going to put you out of business."

"Lieutenant Phillips, do you really know what these robots are doing?"

"Making arrests."

"But for what?" Cantrell yelled.

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The lawyer's sudden display of emotion bothered Phillips. Cantrell was either a humanitarian or a meddler, depending on how you looked at it. He was also one of the most rational men Phillips knew. He saved his histrionics for the courtroom, where he could sway juries with shows of indignation, joy, and sorrow. He wouldn't waste his talents on a precinct commander.

"Scan the files of all arrests made by the Humintecs," Phillips barked into the intercom.

A screen on a side wall lit up. Alpha Humintec had made the first robot arrest in an attempted yoking at 10:30 p.m.

"What's wrong with that?" Phillips said.

"Nothing," Cantrell told him. "Keep scanning."

At 10:32 p.m. Bravo Humintec had caught a narcotics pusher making a sale.

At 10:47 Alpha had interrupted a rape in progress.

At 10:48 Charley Humintec had trapped two burglars in a pawn shop.

At 10:50 three men had attacked Charley in an attempt to rescue the burglary suspects. He had subdued and arrested them.

Phillips said, "There's the nice thing about these robot detectives—they're almost impossible to hurt. If a human cop had been in that situation, we'd either have an injured officer or some dead citizens."

The readout proceeded. By midnight the Humintecs had arrested seventeen violent criminals and forty-four suspects in nonviolent crimes. No one had been killed or seriously injured in any of the incidents.

"And that's another advantage," Phillips said. "These machines may look like men, but they pack a wallop that can knock a turbocar off the road. And they carry nerve gases and knockout drugs instead of guns."

"I know the sales pitch, Lieutenant," Cantrell said. "I'm on the Review Board. These damn robots are the perfect cop, infallible and indestructible. Just keep reading."

Violent crimes decreased after midnight, proving how effective the Humintecs were. Normally the blood kept flowing until 3 a.m.

At 12:21 a.m. Bravo had arrested two men for littering.

"My clients," Cantrell said. "One of them dropped a cigarette pack on the street."

"And a human cop would have ignored him," Phillips said. "Littering is against the law, Mr. Cantrell."

Jaywalking, disturbing the peace, underage drinking, littering, soliciting—the Humintecs were enforcing the laws human cops usually overlooked in their drive to hold down the felony rate. The robots overlooked nothing. They were programmed to fight crime, not make value judgments.

At 1:14 a.m., Charley had arrested Erasmus Schmidt and Jennifer Douglass for adultery.

"What?" Phillips said. "Charley has blown a transistor. Adultery isn't a crime."

"You're wrong," Cantrell told

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him. "A Maryland statute of 1745 says it is. Of course, that law hasn't been enforced since the Nineteenth Century."

"I want the full details on this one."

Phillips pushed a series of buttons. A minute later Charley's metallic voice boomed from the speaker in the corner.

"At 1:07 a.m., Eastern Daylight Time, June 28, 2021 AD, while passing a residence located at 732 East Gay Street, I heard the voice of a man say, 'If my wife finds out, there'll be hell to pay.' To which a woman's voice replied, 'So hurry up, lover. My husband gets off work at two.' Under the Appellate Court decision of 2017 AD, concerning the reasons for an officer of the law investigating a crime not previously suspected, I proceeded to enter the room by the authority vested in me through Section thirty-seven, Paragraph (c), Code of Conduct, to wit, breaking down a locked door. There I found two suspects, later identified as Erasmus Schmidt, male, and Jennifer Douglass, female, engaged in an act of carnal knowledge. Asking them for identification and fending off the threat of physical violence by the male, I ascertained that both are married, but to parties other than each other. So at 1:14 of the same date as above, I arrested them for the crime of adultery."

The transmission ended. Phillips groaned and dialed two more cups of coffee.

Cantrell said, "It gets worse, Lieutenant Phillips."

"Have they arrested every teenager in the district for making love?"

"Fornication isn't against the law."

"Thank God for that," Phillips said.

Five more arrests for adultery followed. There was also one case of making book. Then Alpha arrested a man and wife for gambling.

"That's another one you should investigate," Cantrell said.

The suspects had been playing strip poker.

Charley arrested an unmarried man and woman for performing unnatural sex acts. His matter-of-fact, clinical description made Phillips almost understand Cantrell's prejudice against the Humintecs.

He said, "A robot shouldn't even know about such things, let alone arrest people for enjoying them."

A disheveled policewoman threw open the door, ran into Phillips' office, and said, "Sir, the robots have gone insane. They're . . ."

She screamed as Bravo lumbered into the office.

"Excuse the interruption, sir," the Humintec said. He grabbed the policewoman. "Will you come along now?"

"Sir . . ."

Bravo's left hook knocked her out. Phillips jumped up.

"What are you doing?" he yelled.

The robot said, "I am sorry this incident interfered with your work, sir. The suspect escaped after attempting to interfere with the arrest of a suspect who was being charged with interfering with the arrest of a

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suspect for misappropriation of Megapolitan property."

"What?" Phillips said. "Explain yourself."

"This policewoman attempted to prevent me from arresting the booking sergeant, who had refused to charge Officer Vitelli."

"What did Vitelli do?"

"Misappropriation of Megapolitan property, sir; to wit, he filled his private copter at the precinct gasoline pumps."

"That happens all the time," Phillips said.

"We will stop it," Bravo said, marching out with the unconscious policewoman over his shoulder.

Cantrell grabbed Phillips as the lieutenant started after the robot.

"Do you want to wind up in a cell?" the lawyer said.

"A cell?"

"These machines will throw anyone in jail who interferes with their enforcing the law."

"But they're arresting cops," Phillips said.

"That's my point."

"I'm in charge of this precinct."

Cantrell sighed. "You *think* you're in charge, Lieutenant, but the Humintecs obey only the law. I was one of the damn fools on the Review Board who insisted on that safeguard."

"They've gone berserk," Phillips said.

The intercom came on, carrying the sounds of warfare in the communications room. A technician had refused to send a copter out to pick up a patrolman under arrest for accepting a free cup of coffee from a restaurant owner. The Humintecs had placed the technician under arrest, and the other technicians were trying to stop them. The Humintecs were winning easily.

Alpha said, "We shall establish order very soon, sir."

"What cop can turn those machines off?" Phillips asked Cantrell.

"No cop can. Why don't you reinstate those police officers charged with minor infractions? You have that authority."

Phillips ran down the steps and into the front area of the station. Bravo sat at the booking desk. Phillips circled behind him to remove the cell keys from their peg.

"May I help you, sir?" the robot said.

"Tell Sergeant Al Ellis to take over this desk at once, Bravo Humintec. Then return to your assigned patrol area."

"Sergeant Ellis is being detained, sir."

"What for?" Phillips said. "And give me a full report—none of this suspect, other suspect, third suspect, robot double-talk."

Bravo said, "Sergeant Ellis has been charged with attempted murder of a police officer who was discharging his lawful duties. Specifically, Sergeant Ellis fired his sidearm at Alpha Humintec, who was arresting Policewoman Koznolski, who had kicked him for attempting to arrest Officer Flannery, who had struck him with a nightstick while he was gassing Policewoman Potter, who had hit him with a chair when he punched Communications Technician Washington, who had shoved him while

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he was arresting Communications Technician Duerbek for refusing to dispatch a copter to pick up Officer Malkus, whom Charley Humintec had arrested for accepting a bribe: to wit, one cup of free coffee offered by the owner of the Passionate Pussycat Restaurant and Bar."

"My God! Do you have the entire precinct duty force in the cells?"

"No sir. Sergeant Garner, Patrolman Goldberg, and Patrolman Davis remain on duty."

Phillips took a deep breath, tried to remain calm, and said, "Free all the police officers immediately. Then get the hell back to your assigned beat."

"Sir," Bravo said, "I cannot release felons."

Phillips saw Cantrell enter the room. He said, "What's that authority you said I have, Mr. Cantrell?"

"Section fourteen, Paragraph thirty-eight, Departmental Regulations, Lieutenant. But there's a catch. I advise . . ."

"You heard him, Bravo," Phillips said. "Release the police officers into my custody."

Bravo said, "That would be Policewoman Gantry and Officer Smathers, sir. The others are felons, not covered under the regulation this gentleman cited."

"What are Gantry and Smathers charged with?"

"Policewoman Gantry was observed misappropriating Megapolitan equipment, sir: to wit, the use of one official paper clip to repair a private lingerie strap. Officer Smathers was arrested for public littering and being an unsanitary nuisance while defacing public property; to wit, he was observed spitting on the steps of this precinct station."

"You stupid hunk of nuts, bolts, and illegitimate transistors!"

Lieutenant Clancy Phillips had spent twenty-four years on the force. During that time he had heard and remembered every phrase of profanity that had been part of the English language since the late Twentieth Century. He now used these phrases to describe and analyze Bravo Humintec's intellect, ancestry, religious preferences, and sexual proclivities. A human policeman would have started swinging after any one of thirty-two separate insults. Bravo, being only an imitation human and incapable of such emotions as pride or anger, bore them stoically. He was, however, programmed to react firmly to the commission of a crime; to wit, blasphemy, as defined by a Maryland statute of 1724. The robot quickly subdued and booked Phillips.

"So how the hell do you propose to run the precinct?" Phillips said.

Bravo said, "I am not programmed to run the precinct, sir. Sergeant Garner is now the senior man on duty. I shall so notify him when I find him."

"If he's lucky, you won't find him, you dumb hunk of iron."

"Don't worry, Lieutenant," Cantrell said. "As your attorney, I shall work for your immediate release."

"You aren't my lawyer!" Phillips yelled. "I wouldn't have you for

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my lawyer if you were the only licensed attorney in town."

Bravo turned to Cantrell and said, "Megapolitan Ordinance 18-377620935 states that any attorney who solicits clients within the premises of a precinct station shall be immediately and forthwith barred from that official abode. Will you leave quietly, sir?"

Cantrell said, "Then you leave me no choice. As a member of the Police Review Board, I order you to cease and desist from all performance of your official duties and to release all police personnel now held in custody."

"That, sir, is overstepping your authority and abusing the public trust, as defined by Ordinance 20-9987120. As such, it is an actionable offense. Please come along quietly, sir."

Phillips and Cantrell found two seats on the steel bunks not occupied by other policemen, adulterers, gamblers, and common felons.

"Now what?" Phillips said.

"Maybe they'll arrest the mayor," Cantrell said.

"This is a helluva time to think of politics."

"Actually, Lieutenant, I was thinking that the mayor is the biggest crook in Baltimore. There's no way he can escape the attentions of these damn robots. And he also happens to be the only man with the authority to turn off the Humintecs. It should be an interesting confrontation."

"Don't bet against the Humintecs," Phillips said. "They're the perfect cop."

"Making the world safe for perfect citizens," Cantrell laughed humorlessly. "It's going to be a very small world, isn't it?" ■

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in times to come The old view of Mars—crisscrossed by Schiaparelli's "canali" and Lowell's "oases"—has been thoroughly discredited. Mars is no longer the exotic planet that Edgar Rice Burroughs described, populated by beautiful princesses and sixteen-foot-tall greenish swordsmen. The pitiless eyes of spacecraft cameras have shown Mars to be devoid of canals and civilization. Not even Ray Bradbury writes about bone-chess cities and telepathic Martians anymore. No science fiction writer can. Right.

Wrong! Greg Bear's "A Martian Ricorso," which leads off next month's issue, tells of a Mars that would have surprised Schiaparelli, astounded Lowell, and made Stanley G. Weinbaum smile in appreciation. It's a strange story, an *outrageous* story—and one that will stick in your mind for some time to come. So will the cover illustration by Rick Sternbach.

The second installment of Frank Herbert's massive "Children of Dune" will also be in our February issue. As well as: "The Winnowing," the latest of Isaac Asimov's all-too-rare short stories; and "The Discovery of the Gypsy" by Richard Carrigan, an explanation of how the latest results from the high-energy physics experimenters are tying together three of the fundamental four forces of the universe.

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SEVEN IS A BIRDSONG

The difference between a man and a machine is fear—and courage.

C.L. GRANT

Parric sat just inside the mouth of the small cave, waiting. The low shrubs on the hillside had long since withered into autumnal skeletons, and he could see easily the deserted track of the road midway down the slope, a road that had once led from town to town and now did little more than interrupt a forest. Below the cracking tarmac was another slope, somewhat steeper but no less densely covered; and the trees down to the narrow valley floor alone clung to remnants of a dull green summer. The air was chilled, the sky a fragile deepening blue. He caught himself wishing for a fire to warm his hands and tucked them between his knees and squeezed, blew out and watched the pale traces of his breath falter and vanish. Again he scanned the road, the slopes, the hills beyond, looking for Chamra and the others; and as he looked, he listened. For a bird. Any bird. It had been several days, and that was far too long.

Remembering: when the birds had been too few, and the insects had been too many; now it was practically normal, but the vacuum of the southward migrations still made him nervous.

Thinking: if time travel were possible, I wonder if I'd have the nerve to slip back and murder my grandfather? The world, such as it is, would still be the same most likely, but I sure wouldn't have to be here. It would be damned tempting. There wouldn't be any

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problems, any worries, and there sure as hell wouldn't be any nightmares of dying.

Gusts of light wind kicked at the browning leaves, dropping several in a twisting fall from the cap peak ledge that jutted out over the cave's entrance. At the back of the shallow den water dripped slowly into a basin carved from a section of log, half a day for half a drink. There was a rock lying outside beyond the shadow of the ledge, and on it a praying mantis buffeted by the wind. He wondered why the first frost hadn't killed it, why the damnably everlasting silence hadn't goaded it or its cousins into evolutionary song.

And in wondering, gagged on the impulse to sing himself. No need for words, nor even a melody. Just noise. And for all that, he decided, a scream would do as well.

A crashing, magnified, and he ducked further back. One hand hovered over the compact weapon clipped to his belt, the other rested lightly on the ground to brace him should he need to spring in an attack, push in retreat. The mantis disappeared. The crashing became fainter, slower, and the tension in his muscles eased almost instantly. Anyone approaching from below would be struggling through the sun's glare and correspondingly helpless; and from above and beyond their shadows would be betrayal enough no matter how wary they were.

He listened.

Still thinking: Dumb. I should be back at Town Central now instead of squatting in this stupid hole in the ground. I should be diligently watching a bank of screens waiting for reports on the progress of the stupid world. Damn! I should be stopping off at Dinko's for a drink—*what do you mean, my limit's up? My credit's good, damn it. Don't you know who my grandfather was? Ain't you never heard of my father? Age? You're kidding. Damn near a quarter of a century, and you know it, Dinko. And brother, you don't know how old that can be*—maybe winking a little at the waitress because Chamra's too busy living a stupid principle, and then shooting a quick game of craps with Morey, who I owe, and Delta, who I owe even more—*cover that lot, you creeps, and I'll show you a trick I learned at my mother's knee; never fling them, roll them, she told me, and while everyone's waiting you think them up seven*—and maybe drinking too much, too quick, fade out to dawn. Now there's where I should be, damn it. Anywhere but here.

It was thirty minutes before he relaxed completely and sat again. A finger scratched at the center blond streak in his dark unkempt beard, poked at the fabric of the cap that fit like a second, unwanted skin over his hair. For a moment he wished he had a mirror so he could see what he had become. Then he grinned and rubbed at his eyes, feeling the gritty dirt penetrate his skin. In the world outside the Town, vanity was less a vice than a dream.

He had already dismissed the noise: a dead branch severed by its own weight, or a boulder loosened

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by freeze and rain. Whatever it was, however, it wasn't people; and the animals that were left kept a frightened distance from whatever emitted human scent.

His right hand rubbed unthinking at his left wrist to replace the empty feeling the absence of his watch had created. Withdrawal symptoms, he thought when he realized what he was doing: the everlasting need to know what time it is when all one really had to know now was how long until the sun set and the insects came out.

And before that happened, something else had–

Crashing again, sustained, distant, hinting of panic. Immediately he flattened himself against the cave's floor and pulled forward until he could look down onto the road. An ant crawled over the back of his hand, a spider hung dizzily in front of his eyes until he blew gently and it scurried up into darkness. He tried to recall his combat training, remembered only the bruises received in the learning.

He stiffened. Two figures were moving up out of the trees onto the shoulder of the road. They were dressed in Hunter's green as he was, their hair covered by tight-fitting caps of the same splotched arrangement of camouflage cloth. One of them shouldered a heavy-looking pack while the other carried a bulky ML-9. No true Hunters here, Parric thought, or they would have been toting projectiles, not lasers. And despite their attempts to be cautious he knew more by instinct than design that neither were they Rogues.

He waited until they moved to the tarmac's center and one shaded its eyes to scan the hillside before he pulled himself to his feet and stepped through the uprooted bush that fronted the cave. He waved until they spotted him, raised both arms and crossed his wrists over his head in the prearranged signal. One of them waved back in a similar manner, and he laughed as he broke into a run.

"Boy, are you ever overdue," he said once he had stumbled out in front of them. "Chamra–" and he stopped his mocking chiding when he saw the bandage.

Chamra, her face mapped with streaks of dirt, touched her forearm above the wound. "Troubles," she said as if what had happened had been no more serious than colliding with a chair. She tugged at her pack's straps and looked around anxiously, a movement Parric knew was decidedly uncharacteristic. "Do you think we should be standing out here in the open, Matt?"

He shrugged, suddenly conscious of the battered condition of his own Hunter's costume and wondering why the hell it should matter. "The way you two came up here," he said finally, "every village in the sector will know where we are. But if it will make you feel better . . ." and he turned around to lead them back to his cave.

"Matt," she said.

"Yeah?"

"It's good to see you."

"Love, you don't know the half of it."

The cave was far too small for

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the three of them to fit in comfortably and, overruling her by-the-book misgivings, Parric chose a humped tree root to sit on, a smooth-barked bole to lean against. Then he extended a hand to the third member of the party, and he smiled. "Dix, you bundle of cheer and gear, how're you doing?"

Dix grunted as he set the ML's butt onto the ground and propped the weapon against a fallen stump. "Getting old," he said.

Parric laughed. Chamra had seated herself cross-legged in front of him, and he winked at her. "Does he always talk this much?"

"I can't shut him up. I don't know how your poor old grandfather stood him."

Dix said nothing. Instead he wrestled a huge rock to a position beside her and sat on it. His thin face showed no strain, his hands remained steady as he retrieved the ML and cradled it across his legs.

"Troubles," Parric said. "What kind? Rogues?" He glanced at Dix but there was no reaction that he could detect.

Chamra shook her head. Her cap bulged where her hair had been pinned up, but strands of auburn wisped at her temples, winked a faint red as the sun tightroped the mountains. She wiped at her face with her sleeve, tried a smile and failed. "We came across a small settlement three days out from Central that hadn't been mapped. It's not in your area," she added quickly to his frown, "so don't let it bother you. But we were taken by surprise."

"Walked right into it," Dix said.

She nodded. "Just like children when they go outside the Town for the first time. Like we were complete novices, Matt, absolute dopes. Dix knew right away they hadn't been integrated, but before he could warn us they'd started shooting." She held up her arm unnecessarily. "I got some skin torn off, that's all. Only . . ." Her face darkened. "Potter was with us. You knew him, didn't you?"

"Was? Knew?"

Dix shifted noisily and Parric stared at him.

"Hit once, right in the chest. We had to leave him. He was dead."

Are you sorry, Parric wondered, and can you be? He remembered the handshake, the other's skin slightly cool against his palm.

". . . but when Dix here hauled out the ML," she was saying, "they scattered enough to give us room to run. I don't think we were followed. In fact, I'm sure of it. But if they have a working comsystem, Matt, we could be in for a lot of trouble at Corbine. Those people reacted too fast for it to be natural. Either they knew we were coming—which is not very likely—or they've had Rogue problems and were jumpy. And if they've had problems, we might."

Parric looked again at Dix; he was suddenly ashamed, but he couldn't help it. Immediately following the year of the Plague Wind in his grandfather's prime, what had been left of the country had withdrawn into isolation. From the world, which was no better off, and from itself. Villages new and old had scattered throughout the

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mountains east and west, erecting physical and commercial barriers against encroachment from their neighbors, against nightmares of the soul given substance in the Rogues. A project the eldest Parric had participated in as a minor cog explored the manufacture—*creation? Matt wondered*—of androids designed to bolster an inexorable decline in population, the primary purpose being not to inject more labor but pure consumerism into the abruptly precarious economy. The Towns had been established as pilot/watchdog programs, but all save one had been destroyed or abandoned when an intra-Eurecom war had exploded beyond control into the wind. The Plague Wind. Hysterical bioretaliation. The Plague Wind. Only the Central had been spared, and to that the Continental Government had retreated, to retrench, to mull, and to eventually initiate a bilevel plan: reform a nation to reform a world, and repell those androids whose quasi biomechanisms had been irreparably unbalanced by the viral Plague.

Chamra's principle. Parric's Rogues.

"Mathew," Chamra said, her smile a half-hearted softening of her annoyance, "would you mind staying with us? It gets lonely around here."

He blinked and grinned stupidly. "Sorry. It's just a habit one falls into out in the wild. Solving the great philosophical and otherwise problems of the world, you see."

"Nice," she said, and he wondered what it would take to knock the business out of her living. "But what are we going to do about our own, Matt?"

Dix maintained his silence, and Parric only shrugged unconcernedly. The situation she referred to was not rightly his in the first place. All he had had to do was scout Corbine, make a friendly contact or two, and disappear. Which he did. As a Hunter lost from his own village—*somewhere over there, you know where it is? Hell, am I ever lost. Some Hunter, right? Fell into a ditch and lost my pack, rifle, every damn tin can I was carrying*—looking for a new place to stay to avoid the Rogues, and with vague news of some other people who were trying to pull things together again—*nice place you have here. You ever shoot craps? Carry these die with . . . sorry about that, friend, what do you call them? Dice? I know a little, but not much. Show you a trick I learned at my old mother's knee. You have andys in this—hey! sorry, don't get so excited. I just heard they weren't all Rogues, you know what I mean?*—making himself useful, then fading again to return with an integration team from Town Central, fading once more to the next village on his list.

It was Potter and Chamra and Dix who were to have moved into the community; Potter and Chamra and Dix who were going to reabsorb Corbine into the ContiGov web and prepare it for a population increase not entirely human.

"Hey, listen," he said when Chamra's stare began to unnerve him, "don't you look at me that way, Chamra. You're always doing

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that and I don't like it. How should I know what you're going to do now? You know, I really don't appreciate it when people take my ancestry for an automatic indication of brilliance on my part."

"Matt! Nobody said—"

"Just because my good old high-minded grandfather was in it from the beginning doesn't mean I had to inherit his brains, you know."

"Will you please—"

"Chamra, the only reason I let them talk me into coming out here was because you kept pushing at me to find my feet. Because my father . . . because he was . . ."

He swallowed, looked hastily around and waved off his speech as something of no further consequence. And he was angry, at himself for allowing her to continually affect him this way, and for thinking love and revenge were adequate reasons for carrying his father's tattered banner. Knighthood is dead, long live the crap game, he thought bitterly, and while you're at it, why don't you stop feeling sorry for yourself?

He looked up again, smiled and shrugged, and Chamra pulled a small pouch from inside her shirt and handed it to him. He took it and twisted to one side as Dix lowered the ML to the ground and set up a tricone burner to heat their evening meal. Amazing, Parric thought as he listened to the sounds of preparation, and remembered how his father had dubbed the post-Plague world the *techprim whirl*, an unlikely combination of technology's shards and pieces of primitivism, where landcars and hovercats languished for want of drivers, where teams were sent into the hills to snare live birds and return them to inflicted farmland to battle the insects, and where tribalism was being reborn complete in some cases with totem relics. He had despaired at the race ever pulling itself together again, had traveled to dead Philayork to prove his point. And that pessimism had forced Matt to ignore his supervisors' entreaties to get out into the world to prove his father wrong.

But on the other hand, when his grandfather had been asked why he bothered to keep on trying, the old man had only shrugged and said, "For history. Why not?"

Parric turned the pouch over in his hands without opening it. There would be a map accurate to the roads, blank in its situation of communities; orders for the team in the smooth reintegration of Corbine; and perhaps a personal message from the TC Governor.

But it was all heroic fantasy now. Potter was dead and unburied, and Dix could not go in with the girl alone. Should he be found out, Corbine would destroy him as Salem had its witches. They definitely would not remain calm long enough to understand that while all Rogues were androids, not all androids were Rogues. How then could they know that Dix was not a Rogue, but the android who had saved his grandfather's life and served now as a model for all those who came after? How could they know that when his grandfather died trying to save Philayork from disintegration it was Dix who car-

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ried him back to bury him next to his wife?

Thinking: Grandfather, this isn't fair and somewhere up there you know damned well it isn't. I'm not you and I'm not my father. I'm only Mathew, the crap game loser.

And thinking: six and six, boxcars, craps; if I could only throw them more slowly maybe I could make them come up grinning.

He pressed a hand against the dice he carried in his pocket and shook his head. The best he could do, he finally decided, was get the maps corrected and go back to Town with Chamra and Dix. She would understand. She knew him too well. He tugged thoughtfully at his beard, then, and spat in disgust when a beetle fell into his palm.

It was dark by the end of the meal, a weak bulging moon and a spattering of stars providing scarcely enough light to cast a shadow. The orchestration of insects was unchanged, the mutterings of the wind reduced to an occasional murmur.

Chamra, always cautious, had insisted a watch rotation be established, and Parric didn't argue. If that unknown settlement had been bothered by one or more Rogues, he didn't want to take the chance on becoming a dead hero. In the morning he would tell them they were heading for home, and though Chamra would fight it, he was sure he would prevail. Another team would be sent out. He would probably have to find another woman to dream after. He looked back into the cave, saw her lying fetuslike against the sloping wall, saw Dix sitting immobile by the dripping water. Or thought he saw, he corrected himself, since the outside light penetrated less than a meter into the opening.

He felt guilty. After a lifetime association with the apparently ageless android, he hated the uneasiness that dogged him whenever Dix was around. And further, he hated himself for volunteering for this job in the first place, and his mind became cluttered with *ifs*.

If his father hadn't been killed by a Rogue during a trip back to Philayork to measure the city's dying . . .

If his grandfather hadn't been so anxious to repair mankind in time for the somewhen return of the first Starship launched fifty years before the war . . .

If he himself hadn't floundered for so long wondering whether they should have let the rule of medieval force maintain its clumsy grip rather than trying to reimpose the structure of reason . . .

The insects stopped.

It was a second before Parric realized what had happened, a second more before he tugged at Chamra's legs, whispered to Dix to find a position outside the cave. He loosened the clip that fastened his handgun to the belt, felt with his thumb the raised code of the load indicator.

The trees became tombstones, the brush squat mausoleums, and somewhere in the silent Appalachian graveyard ghosts were walking.

A footfall. From below. Parric

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pressed against the wall, one hand passing slowly in front of his eyes as if he could brush away the darkness. Chamra knelt opposite him, Dix had taken to the ledge. But still there was nothing.

A cricket sounded hesitantly, and stopped.

He felt himself leaning forward to stare and checked the movement before he exposed himself. He glanced over to see Chamra intently watching the hillside. Don't look directly at anything, he tried to tell her without speaking, if you stare at a tree it'll start moving.

Another cricket, cut off.

The road, he thought. No sounds from the forest so whoever it is will be coming along the road. He reached out and tapped Chamra's shoulder, couldn't help grinning when she jumped. He pointed, then traced the roadbed until she nodded understanding. The hair that had come loose from her cap was flattened now against her skin, looking disturbingly like streaks of dried blood. Carefully he edged closer, rested a hand on her arm and squeezed. There was no response, and he shrugged. He wasn't surprised that a manful reminder of his presence was hardly reassuring; his reputation at Central had not previously included legends of great daring feats.

Oddly, he recalled an afternoon with his father just before he'd left for the city. Matt had complained that his own work at the monitoring system was certainly valuable enough in the long run and didn't deserve the ill-concealed scorn some of the elders directed his way. His father had agreed. Adventure, he had said, was something fools fell into and wise men defused. And then he had gone to Philayork.

A spray of dust drifted down onto his face and he stiffened. The ledge. Dix's extranormal weight—he turned to Chamra too late; the shale gave way and spirals of painfully red sunbursts blotted out the forest, the cave, the sounds of his curses. A moment later he struggled to his feet, slapping at the dust that coated his lips and clung to his lids. Chamra was half-buried, and when he put a hand to her head, it came away wet.

Then Dix righted himself and hefted the girl into the cradle of his arms. "Leave now," he said, not waiting for Parric to reply but immediately scrambling as best he could up and away from the road. Parric opened his mouth to protest. The back of his neck and head stung from the impact of the collapse, and a residual dizziness made him stagger in place. But Dix was already angling toward the curve of the hill, and Parric turned around.

Standing in the road was a man. Naked to the waist, trousers in shreds. His head was cocked at an odd angle and one arm dangled loosely at his side as he turned his torso like a rusted radar dish. When he took a step forward, Parric saw the knee of the left leg refusing to bend. A moaning. Another figure: squat, naked, and even in the dim light Parric saw it was sexless.

He stepped back, tripped and

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spun around to catch himself before he fell. Then he pushed away from the cave and began to run.

His hands stretched out to grab at trees, pulling to increase his speed, blocking to prevent collision. Suddenly he remembered the weapons still lying back in the debris of the cave-in. He stopped, skidding, but the Rogues were already stumbling onto his trail, their faces completely expressionless despite the shadows of the moonlight.

And in that moment there was nothing. Time vanished, space distorted, and Parric felt his bowels loosening, his skin shrinking as much from fear as the cold. A low branch spanked at his thighs before he realized he was running again. His mouth was open, gulping; his eyes were wide, blinking away the tears the wind sucked out.

He fell, rose and found Dix still carrying Chambra, still trotting along the slope but moving down now toward a bend in the road. Parric pulled up alongside and began babbling about the Rogues, the weapons, the ache in his side and the stinging that knifed his lungs. And when the android ignored him, he began shouting, flailing his arms to keep his running balance while he tried to pummel Dix's back.

A child, then, fleeing a ghost, screaming against the ripples of blackness that were housed in the corners of a bedroom.

They stumbled into a ditch, climbed to the road and their speed increased. It was not fast enough.

A rock bounced and shattered on the tarmac in front of them. Another thrashed into a bush far to one side.

Parric fell behind and saw Chamra's arms and legs whipping senselessly.

Sounds returned: two boots hard against the road, gasps agonizingly sharp, and a steady atonal moaning.

Dix, Parric abruptly realized, could easily make the distance to Corbine even with Chamra's added awkward weight, but he himself would long before run out of strength. His jaw felt heavy, wouldn't close to keep the night-cold from searing his mouth. He called out once, an urging to continue, then stumbled into a turn and stopped as his hands grabbed at his sides.

Strangely, then, he felt himself falling into a shadowland beyond fear. Hope of escape had kept him running, hope of a life's prolongation jabbed at him like a razored

THE ANALYTICAL LABORATORY/October 1975

Place	Title	Author	Points
1	Star Probe (Part I)	Joseph Green	2.106
2	Unnatural Causes	Spider Robinson	2.385
3	Nuisance Value	James White	3.578
4	Anniversary Project	Joe Haldeman	4.308
5	Sierra Maestra	Norman Spinrad	4.593
6	In the High Court of Justice	Lord St. Davids	4.778
7	The Tripper	Kevin O'Donnell, Jr.	5.498

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spur. But the probability of a far-future dying had become the inevitability of the here and now.

It's damned preternatural, he thought as he waited. The silence of the hills became a dome under which the insects kept their peace, the wind rustled the dead of the forest, and a noncrippling numbness spread through his limbs. He flexed his fingers and yanked at his cap to toss it away, shaking his head to free the black hair that was, as his beard, streaked faintly blond in a reminder of his mother.

The Rogues had come to a halt some sixty meters away, one on either side of the road's center. The squat one carried rocks in his hands, had drawn back the left in an attitude of throwing. The other, its arm still dangling, took a single step and hesitated before resuming a walking pace.

From Philayork to Town Central, Parric thought, it seems as if the family has a damned peculiar cross to climb down from.

He rubbed his hands briskly along his thighs to warm them, then reached into a pocket and pulled out the dice he carried for luck. They were thrice oversized, embedded in red instead of the conventional black, and he wondered if Morey or Delta would approve of his game now.

There was a brief disconcerting moment when a screaming rational part of his mind demanded he turn and run again, but the running—all of it—had stopped, and he looked for a way to make the end, if not swift then at least costly. Without the weapons he was being forced into hand combat, a generally useless defense against the Rogues who were literally unaware of their own strength, yet in their derangement were also frequently unaware of the power of cooperation; the fact that they often banded together was more accident than purpose.

Turning the cubes aimlessly in his hand, Parric looked to the forest for something to use as a club, to at least give Chamra and Dix time enough to reach Corbine. As long as no one there looked too closely, stayed away from the eyes, he thought they just might be able to pass until daylight, giving Chamra an opportunity to hopefully recover and prove that Dix was as harmless as he looked.

The Rogue was closer, breaking into a sprint when Parric spotted the tangle of a lightning-felled tree. He took an impulsive step toward it and the android swerved. The second Rogue heaved a rock, but it landed far behind him, its clatter quickly lost as it bounded into a ditch.

Easy, Parric told himself as his legs tightened, and he thought he could count every hair in his beard. Ten meters, and he held one die in each hand, turning them to expose a corner outward. He was almost distracted when the second Rogue moaned, lifted a hand to throw another rock, moaned again and froze: but when his attacker closed, Parric leaped, thrusting the cubes into its eyes and falling away to avoid the suddenly windmilling arms. Up on his feet instantly, he raced to the tree and grabbed at a

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half-broken branch stump. His hands burned as skin ripped from his palm, but the wood wrenched free in time for him to follow up his advantage.

Perspiration belied the cold, dripped from his eyebrows until he shook his head and advanced on the now blinded Rogue staggering in tight circles, its good arm scything at empty air. Parric licked at his lips, hoped his grandfather's stories were right and swung at the android's hips. He felt something give, and it was down on one knee in a silent struggle, highlights of silver glinting from its shattered lenses. Parric swung again, and again, until the thick pelvic casing dented and cracked to expose the now vulnerable power/motor functions. One final swing, and the android was on its back.

Breathing the only sound, then, and Parric shuddered once before turning to the second Rogue still immobile like a rundown toy. Leave it, something told him, and he hesitated until a shaded red vision of his father's death replaced the forest. He ran to the android and clubbed it in the face, ducked under a wild punch and rammed the branch into its back, forcing it to its knees. Then he hacked, swung, jammed as he grunted, until there was nothing left but a battered mannequin.

He dropped the splintering club, swaying as exhaustion drifted down onto his shoulders. He tried a step, tried another, passed the two Rogues and headed down the road to Corbine.

If he were lucky, he'd be able to catch up to Dix before he reached the village. He was grinning. He knew then the android could have helped him; it would have been a simple matter to put Chamra down and return to the fight. But he didn't, and Parric was glad. It would be the three of them now in Corbine, their presence solid proof of the sanity remaining. Slowly, the ContiGov arm would stretch to embrace; slowly, the village would discover Dix wasn't what he seemed to be, and was a grateful lot more.

The insects returned.

He decided he'd try his hand at fashioning himself another pair of dice. He'd probably still lose in the long run, but if he cast them slowly enough he just might end up hearing that song. ■

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"But they're *cranks!*" Strinberg protested. "Haven't you seen the papers? My God, Arnold Dunn actually claims he's getting messages from Venus!"

"I know," Wallace said.

"You don't believe there's life on Venus?" Strinberg asked suddenly. His limp had become obvious, a sure sign of agitation.

"Not the sort that can send messages," Wallace said. "Perhaps a few microbes—something like that."

"I'd doubt even the microbes," Strinberg told him. "The surface temperature would fry them." He spotted a taxi and hailed it with the casual aplomb of a born Londoner. For a moment it looked as if the driver had missed his signal, then the vehicle slowed and pulled in to the curb. "You don't mind, do you?" Strinberg said. "My foot's paining a bit."

"No, not at all."

They climbed into the cab and settled comfortably in the back seat. Strinberg glanced at him. "Oxford Street, I suppose? We can cut across." He leaned forward and told the driver Oxford Street. As the cab pulled away from the curb, he said, "From what I read, it's a very typical cult, you know. *Time* did a little article about messages from Jesus Christ. Apparently he reached Venus by flying saucer after the Ascension."

"I know," Wallace said again.

"I just hope no one recognizes us going in."

Wallace grinned. "I imagine your reputation can take a little eccentricity."

Strinberg grunted and stared out through the window at a double-decker bus.

After a while, Wallace said, "Aren't you even interested in it as a sociological phenomenon? The mixture of science fiction and religion? I'd have thought it would have been up a psychologist's street."

"It gives me a pain in the foot," Strinberg told him. The expression on his face made it obvious he didn't mean foot.

They sat in silence until the cab reached Oxford Street.

As they walked down the narrow side street to the Bakers' Hall, Strinberg finally dropped his vaguely bantering manner. "Are you ready to tell me why you wanted me to come along to this meeting, Guy?"

Wallace glanced across at him, aware of the change of tone. "I thought you might be able to help me about something. I'd rather not spell it out just yet."

The room was small, probably seating less than fifty. Almost all the rows were full, but they were lucky enough to find two seats together near the back. There was a very low stage to the front, with a lectern at one side and a chair in the middle so large and ornate that it might have been a gaudy throne. Beside the chair was a small table with what looked like a pair of padded earphones. The flex dangled untidily. The audience, with a preponderance of plump, middle-aged women, seemed restless.

Looking round them, a thought struck Strinberg and he whispered, "They look like Spiritualists."

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"Most of them are," Wallace whispered back.

After a while, Strinberg remarked nervously, "I wonder when the show starts."

In fact it started almost immediately. There was a slight flurry to one side of the hall, then Dunn himself was mounting the stage to a scattering of applause. He was a smallish man in his late fifties, with a shock of pure white hair and heavy, calm features. He was dressed casually in sports jacket and slacks, neither of which sat particularly well on him. He took his seat, without ceremony, on the chair in the middle of the stage.

"Hard to think of him as having a worldwide following," Wallace murmured.

"Hardly worldwide, is it?"

But Wallace nodded. "Nearly eighty thousand at the last count and growing all the time. Seven centers in America, one in Australia—Melbourne, I think—several in Europe and one somewhere very obscure like Indonesia. The Lords of the Cosmic Fire have been kind to him."

"The lords of the what?" Strinberg grinned.

A very thin, very pale, very blonde woman opened a gigantic Bible on the lectern and began to read in a tight, grating voice:

"Blessed are they that do his commandments that they may have the right to the tree of life and may enter in through the gates into the city. For without are dogs and sorcerers and murderers and idolaters and whosoever maketh and loveth a lie. I, Jesus, have sent mine angel to testify unto you these things in the churches." She took a sidelong glance at Dunn, lest anyone be doubtful who the angel was, but did not interrupt her reading. "I am the root and the offspring of David and the bright and morning star." She closed the Bible, looked up and added, "The morning star, as you know, is the planet Venus, the present home of the Master Jesus." To Strinberg's surprise, most of the audience promptly chorused, "Amen!" He leaned over and whispered to Wallace, "Good stirring stuff!"

"It's from Revelations," Wallace whispered back.

Strinberg, who was Jewish, said, "I might have guessed it."

Arnold Dunn was putting on the headphones as the auditorium lights dimmed slightly. Another woman, who might have been a sister of the Bible reader, carried a smallish piece of electronic equipment across the stage and set it on the table. Strinberg leaned forward. He had a fair grounding in electronics, but the device was new to him; and particularly in the present setting. It was basically a rectangular black box with a variety of dials, lights and switches. As the woman slipped the earphone jackplug into a socket at the side, he asked, "What's in the box? Do you know?"

"Nothing," Wallace said.

"Nothing?"

"It's an idiot box," Wallace said quietly. "All the circuitry connects the switches with the dials and the lights—they run off a couple of torch batteries. The headphones

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plug into a rubber diaphragm which amplifies cosmic vibrations from some sort of mineral crystal he has in there. Dunn's never made any secret of the plans, so we're quite sure the box can't actually *do* anything."

Strinberg wondered who "we" referred to, but before he could ask, the lights dimmed again and Arnold Dunn sank back, eyes closed, in his chair. A hum of expectation went through the audience, then died into silence. "Here we go," Wallace murmured.

The preliminaries were, if anything, anticlimactic. For a second or two, Dunn's breathing deepened; his body shivered once, as if seized by a sudden chill. Then, in a clear, high-pitched voice, he said, "Arcturus Nine. Here Arcturus Nine. Conditions difficult. Acknowledge. Here Arcturus Nine. We link the network. We greet you." It sounded for all the world like a Dalek from Dr. Who.

"That's a Cosmic Lord?" Strinberg hissed delightedly. He giggled and a woman in the row in front turned around to glare at him malevolently.

"Not quite," Wallace said. He was smiling despite himself. "That was Arcturus Nine. He seems to act as some sort of switchboard."

"Arcturus Nine," Dunn said. "Conditions difficult." He made a feeble gesture with his left hand and the woman who had read the passage from Revelations hurried forward to adjust several of the switches on the black box. Lights twinkled pleasingly. Dunn sighed and seemed to sink deeper into himself. "Thank you," he said in a hoarse voice Strinberg suspected might be his own. Then, in the Dalek tones of Arcturus Nine: "Conditions improving. Conditions improving."

In the pause that followed, Strinberg found himself thinking, *Thank God for that!* But he refrained from vocalizing it, in deference to the angry follower in the seat in front.

"We bring you greetings," Dunn said in his Arcturus voice. "The instrument, Arnold Dunn, functions. We bring you greetings. Here is Varna." There was another pause, longer this time, then: "Love is the Law, Love under Will. Varna sends you love and light. Receive these gifts and rejoice. One greater will now speak to you." It was a different voice this time, stronger, more forceful, with none of the metallic tightness of Arcturus. A collective sigh arose from the audience. Varna was obviously a familiar personality to the faithful.

"*That's* a Cosmic Lord," Wallace murmured. "One of the lesser ones."

"They have a hierarchical structure?"

"Oh yes. Several layers." The woman in front turned round and *shhhed* them sternly. Wallace grimaced ruefully, but said nothing more.

"My children," Dunn intoned. Once again his voice had changed. Now it was lighter, though still resonant. A hint of accent had crept in, although not so strongly as to be identifiable. Like Varna, the personality it represented must

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have been familiar to the faithful among the audience for the effect was electric. A scattering of *Hallelujahs* rose like butterflies. The woman at the black box smiled beatifically. Several others in the auditorium leaned forward expectantly. Strinberg noticed the woman who had *shhhed* Wallace seemed actually to be praying.

"From the verdant parklands of the planet Venus, sister planet of the Earth, we send you love and strength that you may withstand the trials that await you, that you may remain faithful in the face of unbelief, that you may work on in the face of despair. Hear well, my children, for the Green Ray is even now beamed from our central resonator to the building where you sit. Still your minds, my children, expand your auras and allow the Ray to permeate your being. . . ."

Strinberg calculated mentally that the Ray would not strike for several minutes, assuming it traveled at the speed of ordinary light. But either it had been switched on earlier or he had failed to allow for the ability of the Cosmic Lords to circumvent the laws of physics, for the vast majority of the audience turned their faces upwards and closed their eyes ecstatically, as if bathing in some supernatural sea.

"Tonight, my followers," Dunn said, "I wish to tell you something of the ancient history of your planet and how we of the Cosmic Fire come to watch over you from Venus."

The concentration of the audience was too intense to risk another whisper, so Strinberg leaned over until his lips were pressed almost to Wallace's ear. "Does this one have a name? The one we're listening to?"

Wallace glanced at him with a look of mild surprise, then leaned across to whisper back in the same manner. "You have the privilege, old boy, of listening to the voice of Jesus Christ himself."

"Glad you told me. I'd have hated to have missed the Second Coming."

"I wish to tell you," Arnold Dunn said in the voice of Jesus Christ, "of the great war which sank Atlantis, of the crystal weapon used by the Dark Lords in their pursuit of ancient sorceries, of the defensive ring called Wolfbane constructed to the order of the Lord of the Dazzling Face, of heroism and bloodshed, of shining vessels flying through the skies, of cataclysm and disaster, of destruction more terrifying than anything you could imagine, of the sinking of a continent and the trembling of a planet."

Strinberg sat back in his chair. It promised, after all, to be an entertaining evening.

It was still quite early when they left. Wallace suggested a drink at his club and Strinberg accepted with alacrity. They made the journey, again by taxi, in silence.

The steward served them promptly. Wallace was following his peculiar habit of drinking vodka neat. Strinberg, who hardly drank at all, contented himself with a pale sherry. There was a rerun of the Derby in the television lounge

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with the result that the clubroom was almost deserted. Francis Bulmer, the politician, was sitting alone at the other side of the room beside the fireplace, but he seemed to be asleep. The clock on the wall beside the coatrack ticked loudly, evenly.

"Well," Wallace said at length, staring into his glass, "what do you think?"

Strinberg made a tiny noise, somewhere between a sniff and a laugh. "I can certainly see why he's got followers—that talk was quite fascinating." He sipped his sherry. "Full of archetypal elements."

"What does that mean?"

"It means we have to react to it whether we believe it or not. There are certain images and ideas which seem to fascinate the human mind at a very deep level—Jung called them archetypes."

"You mean the Atlantis myth?"

"That was there, of course. But really Atlantis doesn't fascinate as Atlantis. What really draws us is the vision of planetary cataclysm, continents destroyed, that sort of thing. His war between the sorcerers and the Lords of Light is another archetype—the perpetual battle between the forces of good and the forces of evil. You find it all over the place: most religions drag it in sooner or later."

"How seriously did you take it all?" Wallace asked.

Strinberg frowned. "Seriously in what way?"

"Oh, I don't know. You would hardly accept it as history?"

"Of course not."

"I suppose I'm wondering where you think it comes from then," Wallace said.

Strinberg frowned again. He did not understand what Wallace was getting at and did not understand why Wallace should have insisted he hear Arnold Dunn in the first place. But there was obviously more behind it than a casual evening out. "Comes from?" he echoed.

Wallace sighed. "Does he make it all up? Is he a confidence trickster who wants to make a few bob out of gullible people? Is he a raving lunatic? Is he a medium? Or what?"

"Oh, I see. I don't think he's a confidence man—entirely too unsophisticated for that. He isn't a lunatic either, in the sense you probably mean it; not likely to run amok and slaughter innocent bystanders. But he certainly isn't quite sane either. My guess is he goes into some form of light trance which allows the contents of his unconscious to erupt."

"What about the earphones and the black box?"

"Window dressing. As you said yourself, the box doesn't actually *do* anything. At best he probably uses it as a sort of psychological prop. He believes it helps him get in touch with the Cosmic Masters and his belief helps the process along."

"Look here," Wallace said. "You remember the Varna character who came through towards the beginning of the session . . . ?" Strinberg nodded. "He started off by saying, 'Love is the Law, Love under Will'—remember?"

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Strinberg nodded again. "Yes."

"That phrase was dreamed up by a character called Aleister Crowley. He made a name for himself as a sort of black magician—the press called him the wickedest man in the world: took drugs and ran orgies and all that sort of thing. Died in Hastings shortly after the War. Now the thing is there's been a bit of a Crowley revival recently. He has quite a few followers now, particularly in the States. Do you think Dunn's using that phrase suggests he might have some connection with the Crowley movement?"

"It's possible, of course. But I think it's much more likely his unconscious is spinning fantasies out of a lot of diverse material he's read at one time or another. I think if you investigated him thoroughly you'd find he's read a great deal of occult literature before he had his initial revelation from Venus. For instance, he mentioned the Lord of the Dazzling Face, which is a Theosophical reference; and the broad outlines of the Atlantis story are more or less traditional occultism—I got quite a lot of that sort of thing when I was in psychiatric practice. Dunn doesn't strike me as particularly sophisticated or intelligent—"

"He's not," Wallace put in.

"—so he probably accepted everything he read as true. Unfortunately he has the sort of psychological structure which goes with visionary experiences, but he doesn't have the discrimination to know them for what they are. Neither do a lot of other people, so a cult springs up." He spread his hands to denote humanity's infinite capacity for silliness.

"And that's how you'd explain it?" Wallace asked.

Strinberg said softly, "I suspect you're not telling me everything."

Wallace sighed. "No. I'm not—I'm sorry. It's just that I wanted an initial opinion before I said anything that might influence you." He finished his drink quickly and stood up. "Are you in a hurry home or have you time to come over to my flat for an hour or so? There's somebody I'd like you to meet."

Intrigued, Strinberg said, "I'll have to hear the rest now, won't I?"

Wallace left a tip for the steward and they went out into a drizzling London night.

Wallace's flat was within easy walking distance of the club. When they reached it, Strinberg found a tall, gray-haired man in residence, drinking Wallace's scotch. Wallace introduced him as Colonel Harrington-Barr, then shocked Strinberg by adding, "With Military Counter-intelligence."

Harrington-Barr shook hands and smiled charmingly. "Had an interesting evening, Dr. Strinberg? Has Guy told you what it's all about?"

"Not yet," Strinberg said. He looked across at the drinks cabinet. "I think I'd like something stronger than sherry this time."

As Wallace mixed a hefty measure of gin with tonic, Harrington-Barr said apologetically, "You'll have to forgive the cloak and dagger air—my department develops some very bad habits."

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"Are you connected with Military Counterintelligence?" Strinberg asked Wallace. An air of unreality had descended on him: he had known Wallace intimately for years.

"I'm afraid I'm not allowed to say," Wallace grinned.

Strinberg blinked and sat down with his gin.

Strinberg's early years as a psychoanalyst had made him patient. He waited patiently while Harrington-Barr asked him all the questions about Arnold Dunn that Wallace had asked, and patiently outlined the same replies. He waited patiently while Wallace and Harrington-Barr conferred together in low, serious tones about what he had said. He wondered, quietly and patiently, why Military Counterintelligence should concern itself about the activities of such an obvious crank as Dunn, no matter how extensive his following. He even considered the possibility that the whole thing might be an elaborate practical joke dreamed up by Wallace.

If so, it was out of character; but then any connection between a man like Wallace and Military Counterintelligence was out of character too. Although, as a physicist, Wallace might well be involved in national security. It was a rarefied atmosphere in which Strinberg, thankfully, had no previous experience.

He finished his gin and felt his patience drain with it. "I think," he said firmly, cutting through the conversation between Wallace and Harrington-Barr, "you owe me an explanation."

"I think we'd better tell him," Harrington-Barr said. "I've arranged the temporary security clearance." He looked at Strinberg apologetically.

"How much of Dunn's little talk do you recall?" Wallace asked. "The messages from Jesus Christ in particular."

"I've a reasonably good recollection."

"The mention of Wolfbane?"

Strinberg frowned. "The defensive ring? Yes, he said quite a lot about that."

Wallace said flatly, " 'Wolfbane' is the classified code name for a defensive missile system currently under construction in the Arctic. The crystal weapon used by the Dark Lords is a reasonably accurate description of an advanced type of laser under development in top secret military laboratories in Montana. Dunn called the wizard who headed Atlantean research Chan T'su. The scientist currently heading a vital department of atomic weapons research in Washington is a Nationalist Chinese named Chan T'su—also classified information. That's just today. Three weeks ago when Dunn was bringing the latest messages from Venus to a group of his followers in Leeds, he included no less than fourteen separate items of classified information about US nerve gas projects in his talk—all in parable form. That's been the highest count in a single speech so far and the one that drew our attention to him. But an analysis of his previous

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talks shows he's been at this sort of thing for nearly four months. The information is unrelated, except in so far as it's all military and all secret. But the total amount is staggering."

"Our American friends are understandably disturbed," Harrington-Barr remarked mildly.

"You mean the man's a *spy?*" Strinberg asked. He had a mental picture of Arnold Dunn in his ill-fitting sports jacket.

"Obviously," Wallace said.

Harrington-Barr stood up and went over to the window. The gesture struck Strinberg as studied, the sort of thing one would see in a film. "If Dunn was resident in the States, he would be jailed by now. As a matter of fact, I understand if he ever visits the States he'll be met at the airport and spirited away. But as it is, the problem's ours—and since he hasn't revealed any *British* military secrets, it's a bit tricky."

"He hasn't broken the law in this country," Wallace put in.

"Just a minute." Strinberg held up one hand. "There are two fairly obvious questions: where is he getting this information and who is he passing it on to?" A third obvious question struck him and he added, "Why's he doing it in public speeches? I thought spies smuggled microfilm in hollow teeth and all that sort of thing."

Harrington-Barr smiled. "A little James Bondish, but you're largely right. The Venus-Jesus cult is an imaginative cover, though—who on Earth would think of investigating a bunch of such obvious cranks? His only real mistake was cockiness: he passes on the information in fairly clear language. Even so, we damn near missed it. God knows what would have happened if he'd coded it."

After a moment, Strinberg said, "You haven't answered my other questions."

"We're hoping you can answer them for us, Colin," Wallace said.

Strinberg looked from Wallace to Harrington-Barr. The colonel walked back from the window and sat down. "We have fairly reliable information that a man called Emil Kovich attended the Leeds meeting. Kovich's real name, believe it or not, is Emil Beria—a distant relative of the famous Beria. He makes no secret of that incidentally: says he took the new name since Beria disgraced the old one. He's with the Russian Trade Mission. So far, he's kept his nose clean, but . . ."

"Russia?" Strinberg raised his eyebrows. "I thought the cold war was over."

"Don't you believe it!" Wallace said.

"There may be others. There *must* be others. Beria is just the one we've managed to trace at this point in time." Harrington-Barr sighed. "As to where he's getting the information—we don't know. As Guy says, we're hoping you can help us."

"Cloak and dagger isn't exactly my game." Despite himself, Strinberg smiled at the thought.

"Dr. Strinberg," Harrington-Barr said formally, "you are one of the best theoretical psychologists in the

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country. You were formerly a practicing psychiatrist. You have specialized in hypnosis and the use of hypnotic drugs. You are experienced in polygraph techniques, which is something pretty rare in Britain. You also have a clean security record and since you're Jewish, I doubt if you have much sympathy for the Russians, considering what they're still doing to Russian Jewry. We think that if you"—he paused fractionally—"examined Arnold Dunn, using hypnotic or narcotic techniques, you should be able to find out where the information comes from."

"I would have thought you had your own experts in that sort of thing."

"Not of your caliber." Harrington-Barr said. "And we can't afford any slipups. Or time wasted."

"There's one drawback to all this," Strinberg said easily. "I'm not in any position to examine Arnold Dunn."

Harrington-Barr leaned forward. "Dr. Strinberg, two of our agents picked up Dunn after he left the Bakers' Hall tonight. If you're agreeable, you can see him within the hour."

Strinberg felt a deepening sense of unreality as he walked into the basement room at the ministry. He had more than half expected to see Dunn bound and gagged, watched over by two steely-eyed thugs. Instead, the man was sitting in a comfortable leather armchair, smoking a cigarette and chatting to a frail, well-dressed young man who might have been a junior civil servant. Close up, Strinberg noticed Dunn's eyes were a deep, clear blue.

Harrington-Barr walked forward, hand extended, smiling. "Mr. Dunn. I really must apologize for dragging you here at this time of night." He gestured. "This is Dr. Strinberg, who'll be examining you."

Dunn looked at Strinberg, then stood up and shook hands. "Oh yes," he said.

With a feeling that some comment was expected of him, Strinberg remarked, "I was at your meeting tonight, Mr. Dunn. I thought the messages were very . . . impressive."

Dunn smiled, but said nothing. It was as if he was picked up by counterespionage agents every day of the week.

"If you'd show Mr. Dunn into the examination room, Pearson . . ." Harrington-Barr said. Then to Dunn: "We'll try to keep the whole thing as brief as possible."

The young man opened the door and Dunn walked out into the corridor. Following, Strinberg asked quietly, "Is he drugged?"

"Good heavens no!"

"He's taking it all very calmly."

Harrington-Barr shrugged. "You'd be amazed how much stick people are prepared to take when it's coming from the authorities. They hardly ever ask questions if you're polite."

"Even people spying for Russia?"

"Perhaps he doesn't want to blow his cover," Harrington-Barr said.

The examination room was

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equipped like a surgery, the only unusual addition being the polygraph machine. As Dunn, with incredible obedience, stretched out on the clinical couch, Strinberg checked the drugs cupboard.

"Everything you need?" Harrington-Barr asked at his elbow.

"Methedrine?"

"Bottom right."

"Oh yes." He took a capsule from the box and examined it. "I'll need a nurse," he said mechanically.

"Young Pearson's fully trained in that department. You should find him satisfactory."

"Oh."

"Mind if I stay?" Harrington-Barr asked.

"No," said Strinberg. "No, not at all." He filled the hypodermic and turned to Arnold Dunn with a professional smile. "Could you roll up your left sleeve now please, Mr. Dunn?"

"So he's not a spy?"

Strinberg shook his head. "No. Whatever else he might be, he's not a spy." The door behind him opened and a trim young woman came in bringing tea. He accepted his mug gratefully. He felt tired and rather tense.

After the girl had left, Harrington-Barr said, "You're absolutely sure?"

"Absolutely. As far as Arnold Dunn's concerned, the messages come from Venus."

They were sitting in a smallish office almost next door to the examination room. Strinberg sipped his tea, wondering how soon he could decently insist on being taken home.

"But we know they didn't originate from Venus—at least the classified information didn't." Harrington-Barr looked thoughtful. "Is somebody using him as a dupe?"

"How?" Strinberg asked tiredly. "Nobody prepared Dunn's little talks but himself and he doesn't prepare them at all: they come to him when he goes into trance. Unless your friends behind the Iron Curtain have invented some sort of telepathy machine, there's no way anybody could be using him."

"How about hypnosis?" Harrington-Barr asked. "Couldn't the information be planted in advance under hypnosis and Dunn told to forget it until he was speaking?"

"That's possible, of course. I found no sign of any hypnotic block, but I suppose I could have missed it. The only thing is it doesn't make any sense. It's an unwieldy and unreliable procedure and the information would have to be gotten into this country through normal channels. If they can get it out of America like that, they could presumably get it directly to the USSR. Dunn becomes an unnecessary link in the chain."

"Yes." Harrington-Barr agreed thoughtfully. He looked at Strinberg. "So what do you think is happening?"

Strinberg stared at him. "Anything I might say could only be speculation."

"I'd still be glad to hear it."

"I think Dunn's psychic."

"Oh, come on now, Doctor . . ."

Strinberg sighed. "If you dismiss

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that out of hand, you're ignoring the work of some very able scientists -Rhine in the States, Soal here in Britain, Rejdak in Czechoslovakia, Tennhaus in Holland. There's an amazing amount of evidence to suggest the human mind can gain information through extrasensory channels. I think this is what Dunn's been doing, although he doesn't realize it himself. At some unconscious level he's soaking up information about American military secrets, then spewing it out again in the form of parables to suit his particular set of occult beliefs. God knows what the mechanics of the thing are, but that's how it seems to me."

"I think I'd rather believe in the telepathy machine."

Strinberg knuckled his eyes. "I did warn you I could only speculate."

"So you don't think there's any spy ring?"

"No spy ring."

Harrington-Barr cradled his chin in his hand. "What about Beria's visit to the meeting in Leeds?"

Strinberg shrugged. "Pure coincidence. He probably went in to get out of the rain."

After a long moment, Harrington-Barr asked. "What would you do with him? He's still cracking US military secrets."

"That's your pigeon, thank God—I've done my little bit for England."

He stood up. "Can you arrange to get me home, Colonel—I'm quite exhausted."

Harrington-Barr jumped to his feet, immediately contrite. "I'm terribly sorry, Doctor. Do forgive me. I'll get hold of a car and driver."

As Harrington-Barr reached for the phone, Strinberg said. "I think I know what I'd do. I'd have him certified insane. With a bit of pull and his past record, it shouldn't be too difficult. You could tuck him away indefinitely in some nice secure clinic." He paused. "There's always the possibility he might make a very interesting espionage tool."

Harrington-Barr paused with his hand hanging over the phone. "What does that mean?"

"It might be possible to direct his talent. A mind that can tap American military secrets can theoretically tap military secrets anywhere." He took a deep breath. "If you let me know where you're keeping him, I'll be glad to give what help I can."

For the first time since Dunn's examination finished, Harrington-Barr smiled.

Strinberg dialed and waited. After a moment, a girl's voice said smoothly, "Soviet Trade Mission. Can I help you?"

"Extension 8801," Strinberg said.

The line went dead for a moment, then a man's voice said curtly, "Yes?"

"Scramble," Strinberg said. He pressed the red button and waited.

The voice at the other end said, "Line clear."

"Strinberg. I have a message for Emil."

"Petrov here, Doctor. I shall see he gets it."

"Fine," Strinberg said. "I should

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like him to set up the machinery for a high-priority kidnapping, with escape route overseas to home or any neutral country. The subject's name is Arnold Dunn. I shall phone in his location at a later date—it will probably be a country clinic for the insane."

"I have that, Doctor," Petrov said. Then, hesitantly, "This Arnold Dunn—is he a scientist?"

Strinberg smiled. "With his talent, Petrov, I imagine our superiors will think he is an angel." ■

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(signed) Harold G. Meyer, Vice President of Owner

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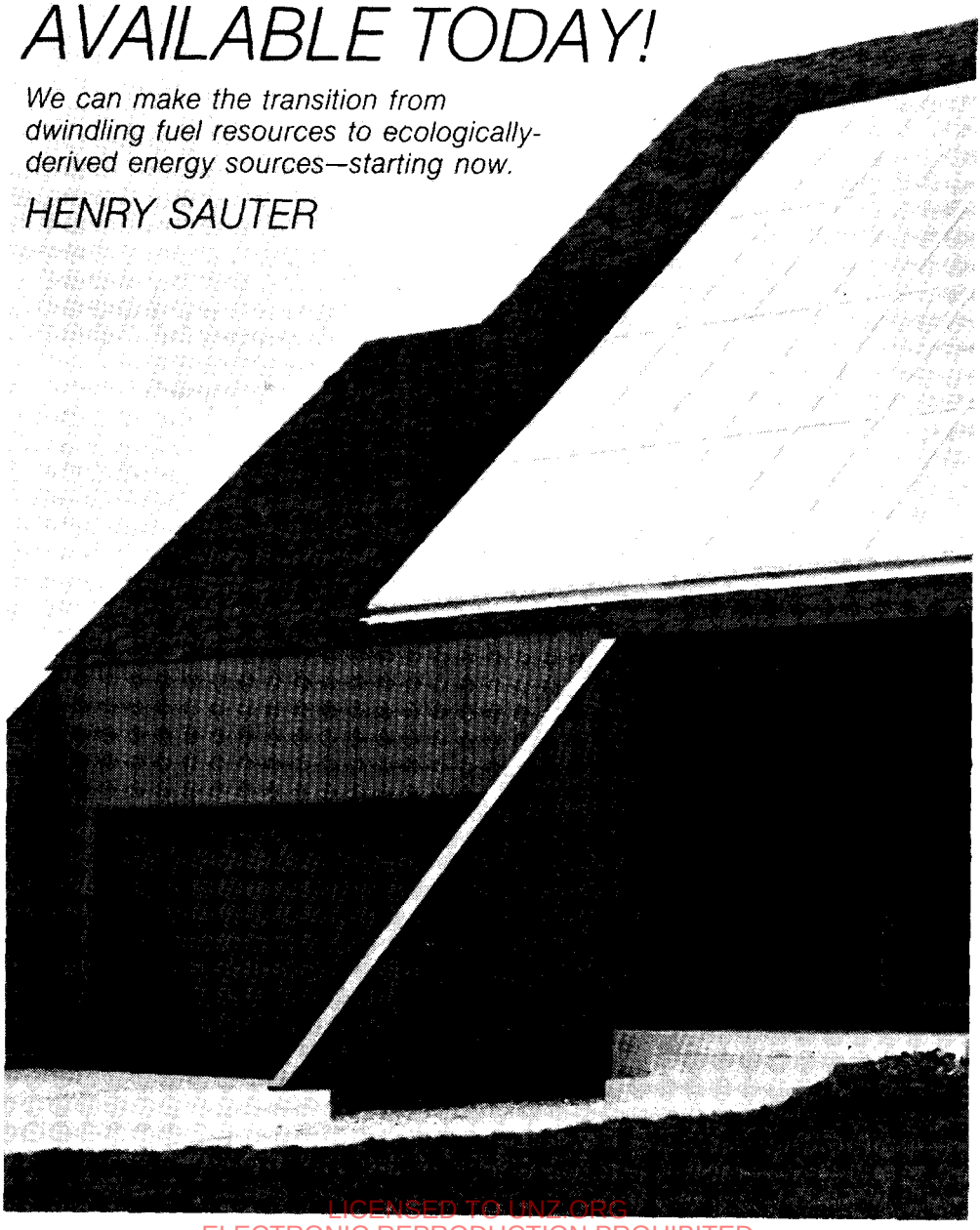

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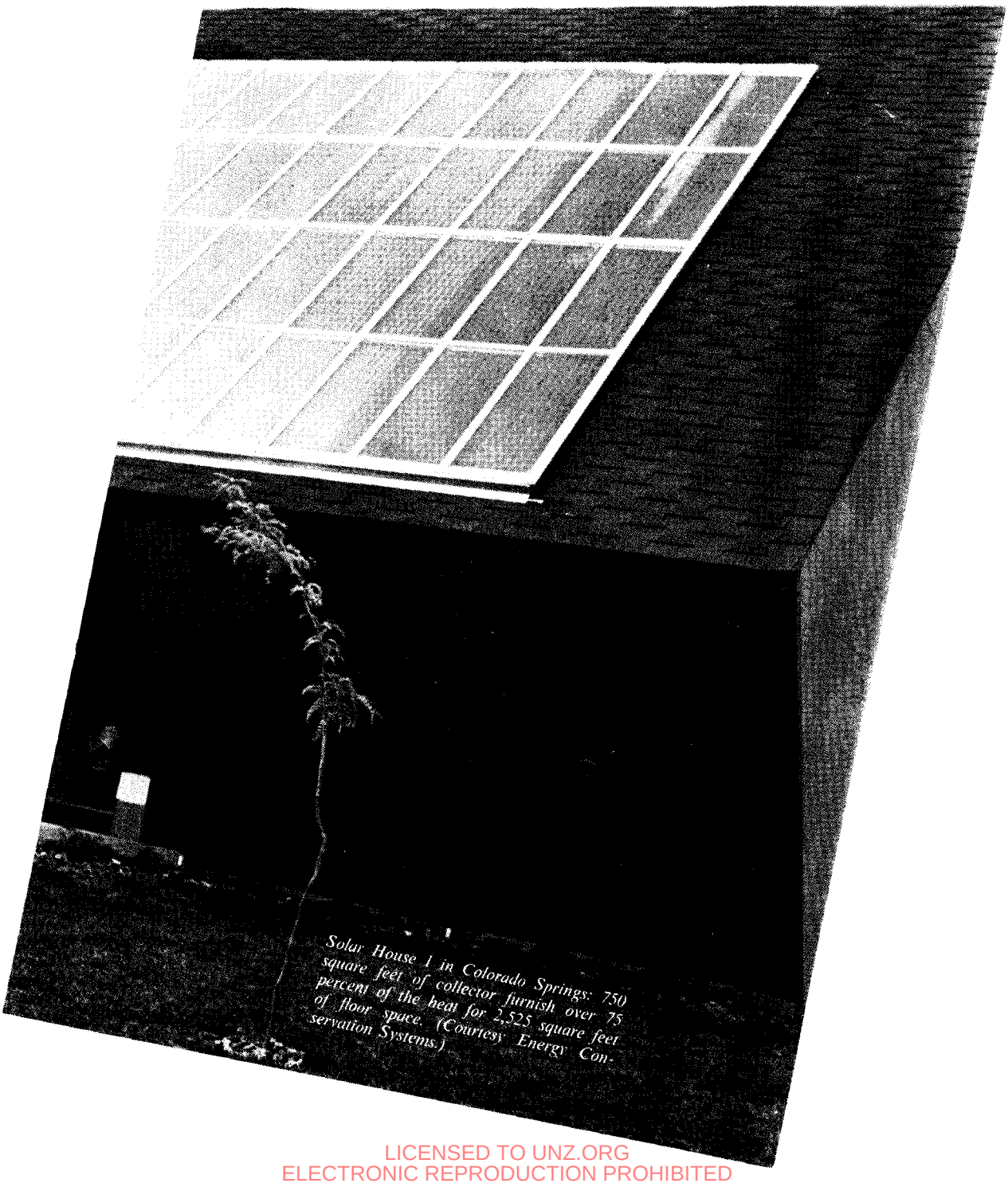

Solar House 1 in Colorado Springs: 750 square feet of collector furnish over 75 percent of the heat for 2,525 square feet of floor space. (Courtesy Energy Conservation Systems.)

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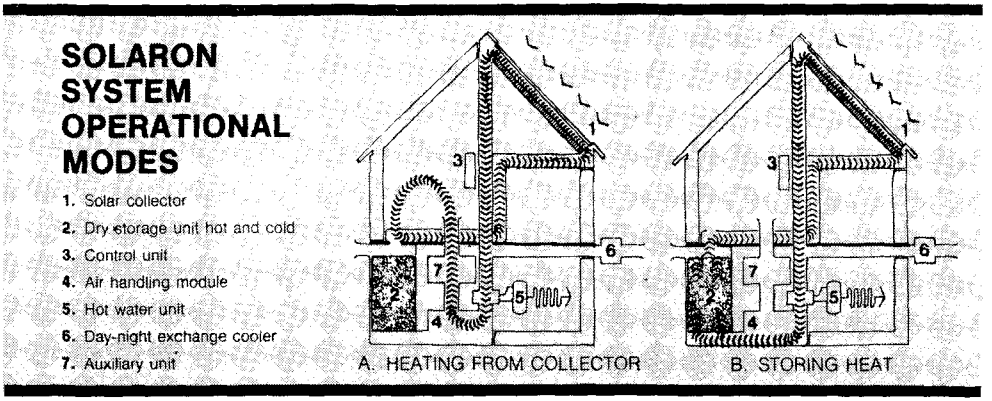
A cartoon depicts a couple of VIP's entering a wind-power research station. One remarks to the other, "Wind power will never get far until we can figure a way to tax it!" Despite this attitude both wind-powered generators to provide electricity and solar heating collectors have not only proven workable but are in practical operation and their use by individuals and industry is being expanded. Yet in a recent letter to customers a major oil company lists neither of these as alternative sources of energy; rather, the policy of the company is that "for the next 10 or 15 years Americans must continue to lean heavily on oil and natural gas resources." No mention is made that fossil fuels are an exhaustible resource.

In direct contradiction, Dr. Barry Commoner, a research biologist and ecologist, stated that full utilization of solar energy for heating (and cooling) would replace 15 to 20 percent of the use of fossil fuels.

A workshop on the advances made in solar heating for homes and other buildings was held at the University of Denver, in collaboration with the University of Colorado in February 1975. The Colorado companies engaged in the actual production and marketing of systems currently in use were represented. US Senator Gary Hart, one of the senators pushing for the establishment of a solar energy research center, was also present; of the center Hart said, "It could grow into an activity of appreciable size." While a research center would be some distance in the future, *the need now is for immediate* aid to assist in public acceptance of solar heating either by helping the companies or by giving a tax credit to the purchaser of an industrial or home solar heating system.

Any discussion of solar energy

Figure 1: A simplified structural schematic of a solar heating system, adaptable to both cooling and heating while still retaining a hot-water supply.



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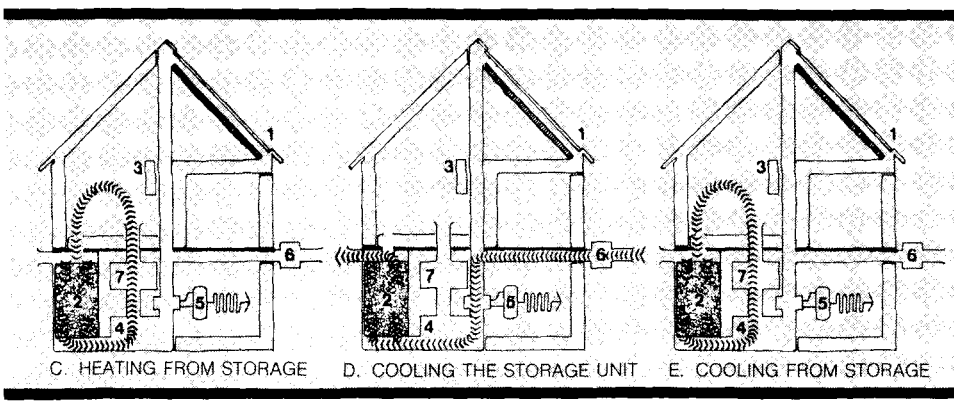
must initially distinguish between heat collectors, which collect heat in a usable medium and store it for later use, and the solar cell, which converts sunlight to electric power. Here we are concerned with the former; the solar cell demands full treatment in its own right. Energy comes in two types: self-contained such as in coal, oil, natural gas, and nuclear where the energy is contained in the storage material; and derivative energy such as sun and wind. For derivative energy, storage media must be found or manufactured, such as water for solar heating and batteries for wind-powered generators.

Water is used in solar heat collection systems because it has a high specific heat, high fluidity, chemical stability, and is nontoxic as well as relatively inexpensive. In a solar system thermostats stop the pumps and clear the system when the collector temperature nears 32°F to negate the possibility of freezing. The process is simple: heat water by the sun to an optimum temperature, usually between 120 and 140°F, then utilize the water to heat the structure either by a radiant heat system or blowing air over the hot water. (See Figure 1.) The high heat in the collector also prevents algae from forming in the system and clogging the smaller openings.

The peculiarities of the system, while presenting no structural difficulties in new construction in most cases, denies its use in existing structures unless major changes are undertaken. While a natural gas furnace and plenum take little space, the collector for a solar system can be upwards of 800 square feet plus a possible 5,600 gallon water tank, depending on the system used. The efficiency of sunlight as a heating method is fairly well explained by the charts (see Figure 2) compiled by Solar Energy Research Corp. Remember that in Colorado, in many areas, an outdoor high day temperature may well reach 70°F during winter yet fall below freezing at night.



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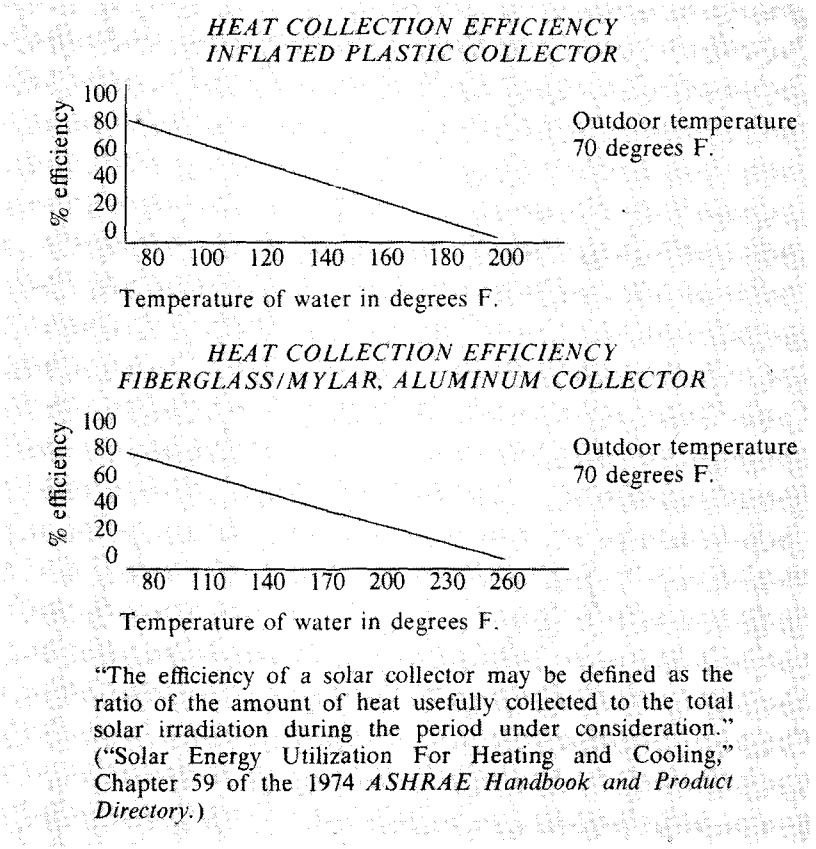
HEAT COLLECTION EFFICIENCY
INFLATED PLASTIC COLLECTOR
% efficiency
100
80
60
40
20
0
80 100 120 140 160 180 200
Outdoor temperature
70 degrees F.
Temperature of water in degrees F.
HEAT COLLECTION EFFICIENCY
FIBERGLASS/MYLAR, ALUMINUM COLLECTOR
% efficiency
100
80
60
40
20
0
80 110 140 170 200 230 260
Outdoor temperature
70 degrees F.
Temperature of water in degrees F.
"The efficiency of a solar collector may be defined as the ratio of the amount of heat usefully collected to the total solar irradiation during the period under consideration." ("Solar Energy Utilization For Heating and Cooling," Chapter 59 of the 1974 ASHRAE Handbook and Product Directory.)

Figure 2: Two types of collector are shown here. The inflated plastic collector is cheaper per square foot but does not have the lifespan of the fiberglass/mylar, aluminum collector. And, as can be seen, the inflated plastic collector is not as efficient in terms of temperature. (Courtesy Solar Energy Research Corp.)

What are the economics of solar heating? In development and custom homes the price of furnace and air-conditioning is seldom quoted as a separate figure, yet it may be assumed as a cost of $3,000, which is admittedly low for some areas. Yet any consideration of a solar system is based on a cost which can range from $3,000 up depending on the system and the size. (See Table 1.) A breakdown based on 1974 fuel and electric costs as against the solar system has been made: in the conventional systems no furnace cost has been included in the figures. The cost comparisons for a few common

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TABLE 1

Composition of the three types of collectors and the price without installation. (Solar Energy Research Corp.)

GLASS, COPPER COLLECTOR	*South solar wall* 2 sheets ⅛-inch tempered glass copper absorber sheet Nextel coating studs, seals and gaskets *North wall* enameled steel with poured-in-place polyurethane truss supports	*Copper spray system, Storage and Controls* same as fiberglass/mylar, aluminum collector *Cost of System (per sq ft)* approximate materials approximate labor royalty Total	 $6.15 2.80 .25 $9.20*
LOW-COST INFLATED INDUSTRIAL COLLECTOR	*South solar wall* 2 sheets UV resistant clear plastic 1 layer high density black plastic steel support studs and lathing inflation fan *North wall* 4 inches expanded polystyrene ⅛-inch fibercrete coating both sides steel support truss *Spray system* nozzles plastic piping pump *Storage tank* vapor barrier	concrete tank lining floating insulation *Control system* integrated circuit amplifier 2 comparator amplifiers: —tank to collector —tank to load silicon temperature sensors all functions 0 to 250 degrees conventional furnace tie-in solid state relay optically isolated *Cost of System (per sq ft)* approximate materials approximate labor royalty Total	 $1.47 1.50 .25 $3.22*
FIBERGLASS/MYLAR, ALUMINUM COLLECTOR	*South solar wall* 1 sheet Tedlar coated clear fiberglass 1 sheet mylar inner transmissive layer aluminum absorber aluminum support struts Nextel absorptive coating *North wall* tilt up light-weight concrete wall light-weight aggregate	reinforcing steel steel truss support system *Storage, Controls* same as inflated plastic model *Cost of System (per sq ft)* approximate materials approximate labor royalty Total	 $2.10 2.50 .25 $4.85*

* Cost slightly higher for systems under 500 ft².

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TABLE 2

FUEL	UNIT COST	HEAT COST/ million BTU
Electric	.02/KWH	$5.88
Electric Heat Pump	.02/KWH	1.96
Propane	.36/gal	5.40
Diesel #2	.32/gal	3.25
Coal	$25/ton	1.52
Natural gas	.50/1,000 cu ft	0.98

heating sources are shown above, in Table 2.

Operating costs of a solar heating system are low, so the cost must be charged against the initial investment, plus interest. One square foot of collector in one year will produce between 100,000 and 300,000 BTU's of energy, so the average of 200,000 BTU's per square foot is used. Table 3 lists five different priced systems ($/sq ft); and cost plus interest rate of nine percent computed over four time periods.

TABLE 3

$/sq ft	30 years	20 years	10 years	5 years
35	17.05	19.10	27.25	45.00
10	4.85	5.45	7.80	12.85
5	2.45	2.73	3.90	6.35
2	.95	1.09	1.56	2.58
1	.50	.55	.78	1.30

There are Denver area comparisons based on heat cost/million BTU. It can be seen that if costs are kept below $6 per square foot of collector surface, the system is competitive with other sources of fuel. The main point to be stressed is that other sources, except perhaps electric, will continue to increase in cost. In the case of natural gas, once the well-head price is no longer under controls, this fuel will be forced into the higher price ranges. And again, looking to the future, there is a definite limitation on fossil fuel supplies.

In terms of house heating, figures collected from Solar House I of the Energy Conservation Systems in Colorado Springs can give a picture of the three main heating months. (See the photo on pages 150-151, at the beginning of this article.) This house has 750 square feet of collector, and 2,525 square feet of floor space, interior.

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TABLE 4

	Heat Collected M BTU/Day	House Heat Loss M BTU/Day	Ave. Daily Temp. °F.
December	692.9	557.6	31.7
January	717.9	664.4	28.6
February	785.4	557.6	31.5

On an extreme day of -10°F in December the house would collect 554.3 M BTU while heat loss would be 1,076.4 M BTU. After several such days auxiliary heat would be required. While no one can "average" weather, it is in favor of the system that December, with its cloudy weather, has warmer days than January, in which there is more sunshine. Also, an impression is left that more collector space and a larger storage area might possibly remove the necessity for an alternative heat source.

There are areas in the US in which solar heating would be of little value, the main example being the coastal areas of Washington and Oregon. During the heating season, which is also the rainy season, the extent of cloud cover can be said to be almost continuous with little sunshine. Yet even an area as cloudy as Washington, DC, can have effective solar heating systems—Dr. Thomason built the first of his three solar houses there in 1959. During the three critical months DC has 26 fewer days of sunshine than does Colorado Springs.

The Thomason process as utilized in Solar House 1 requires a blackened high-conductivity metal over which the water runs in a sheet. The whole is enclosed in a tempered glass. The water is collected in a tank and recirculated to the roof until the desired temperature is achieved. The tank is surrounded by rocks, which absorb heat from the water, and a fan blows air through the insulated collection chamber to warm the interior of the house. It may be said at this point that structural insulation is one of the prime requisites in efficient solar heating: the insulation should equal or exceed that required by electrically heated buildings.

Ron Shore of Aspen, Colorado, represents Zomeworks of Albuquerque, NM. Aspen is at an elevation of 7,900 feet and Ron built a solar heated house with the help of some friends at a cost of $18,000, of which $3,000 was for the solar heating system. The total electric bill for the house runs about $10 per month, while comparable houses in the area have heating costs of $100. Of the $10, $2 is costed to the pumps of the solar system and the rest is for lights and appliances such as an electric stove.

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The Shore house has a concrete floor with pipes embedded in the concrete; water is run through from the collector tank to heat the floor. The system is comprised of a black metal collection surface on the south roof slope, the whole covered with glass, and the water returned to a 5,600 gallon tank. The tank itself radiates enough heat to keep the house comfortable; it was only during an 8-day cloudy period in December that it was necessary to pump hot water through the floor. Again, insulation and proper door management play an important part. No auxiliary heating system is needed, and while at that elevation no cooling is required in the summer, it could be done if necessary by reversing the water flow to night instead of day.

Jim Wiegand of Solar Energy Research Corp. started with solar heating a greenhouse. The first construction was an A-frame backed by black rubberized material and enclosed by a double layer of plastic with an air space between the layers, on the south side. The north side is heavily insulated as are the ends. Inside, water is sprayed on the back of the black material which reaches a high heat-point and the water drains back into the tank. From the tank, water is pumped in ¾-inch insulated pipe 270 feet to the winter greenhouse, through a coil, and back to the tank. The temperature loss both coming and going is ½°F in each case. Over the coil is a plywood box which also houses a fan. The fan draws air from inside the greenhouse through the coil and blows the heated air through a plastic tunnel at the apex of the roof. This tunnel, or tube, has holes in the side at planned intervals to disperse the air uniformly through the greenhouse. One solid-state mechanism controls the flow of water, operation of the fan, turns the pumps on and off according to the temperature of the solar collector, and records the desired operational data on a continuous graph.

The greenhouse described is the winter and seed-starting house; there are two other greenhouses for the spring season adjacent to the collector. The system is especially applicable to car-washes where the heated water can be used then drained back to the tank through a settling tank and filter system.

Adaptation to house construction is being accomplished in cooperation with contractors. To the do-it-yourselfer a package price is offered on a bill of materials, cost estimate, and planning assistance. In house construction the spray system can be used in a vertical configuration and gives almost unlimited versatility.

Solar collection is best in the afternoon when there is more ambient light. A bright, snowy day—the kind where you have to squint in the glare—is optimum. Reflection plays an important part in collected light, and in vertical installations a pool in the front of the collector or a crushed white rock area is of significant assistance. Regardless of the system, a light cloud cover or intermittent sunlight and clouds will be surprisingly effective.

In Boulder, Colorado, construc-

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tion was begun in 1975 on what is the first solar-heated townhouse in Colorado, and may well be the first in the nation. The structure has six inches of insulation in the walls and ten inches in the ceilings. Solar heat will add 5 to 7 percent to the construction costs, but will reduce heating bills by at least 70 percent. In addition to heating the building, the solar system is designed to provide heat for the water heaters.

The solar heating industry is viable and progressive. What of wind power? If solar heating can eliminate 20 percent of our needs for fossil fuels, and the forecast for nuclear in the next ten years—provided monies are found to complete the reactors now stymied by lack of funds—is to provide upwards of 30 percent of our electrical needs, the fossil fuel demand is cut in half. Solar cells can predictably provide the other 50 percent in time, but until then some other means must be found to help. Valid power sources, such as geothermal and tidal, need the same monetary implementation as nuclear. Wind-power generators are *now*.

The history of wind as a power source on land dates back to the 1200's in Europe; there is reason to believe that in some Arab areas it was in use before Christ. Windmills were used to pump water, grind grain into flour, and even convert logs into manageable timbers. In this country the windmill was the common method of obtaining water from wells until the advent of the Rural Electrification Authority, although on large ranches they are still used for wells distant from an electric power source.

Wind-power to generate electricity became common on Midwest American farms during the "dirty Thirties." Local power companies were loath to run lines into high-risk farm areas: the radio had come into its own and a means of keeping the batteries charged was needed. So generators sprang up, with propellers attached and mounted on towers like windmills; not only were the radio batteries charged but a side bonus was obtained in the form of a few house lights. These early generators required a great deal of maintenance and produced a small amount of DC current; yet they paved the way to later research.

It is in the Midwest farm country that wind-powered generators are making a comeback, for some farmers cannot afford even a few hours without electricity for milking machines and coolers, and chick and hog brooders. Besides the US, two other countries are into the use and construction of wind-power generators: Australia and Switzerland. In the "outback" of Australia it is impractical to run power lines to the few and widespread ranch homes; so wind-power answers the need. The basic need is for communications, an emergency radio; but with the refinement of the generators other benefits of electricity are available.

Today's basics are the same: mount a generator on a tower; fix a propeller to the generator; and feed the power so produced to a

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bank of batteries. Then draw on the batteries for the energy needed. If AC is required for some conveniences install an inverter. (See Figure 3.)

The concept is simple: manufacture and construction aren't. In most cases alternators are used rather than generators. Towers can range in excess of 60 feet in height, to take advantage of the best wind conditions. The generator must be mounted solidly so as not to vibrate, and the propeller must be equipped with a feathering device to keep the mechanism from tearing itself apart in high winds or gusts. The optimum wind speed for the generators is from 8 to 25 mph: below 8 too little energy is produced and above 25 the machine can be destroyed—thus the feathering device. And above all, at those heights well-grounded lightning rods must be installed.

Average wind speed and direction for any given area varies from that of another. The US Weather Bureau can furnish general data for a wide area; sample figures and calculations taken from one Midwestern area (see Table 5) give an idea of what total power to expect in a month. This is for example only; each month differs during the year. Anyone desiring to

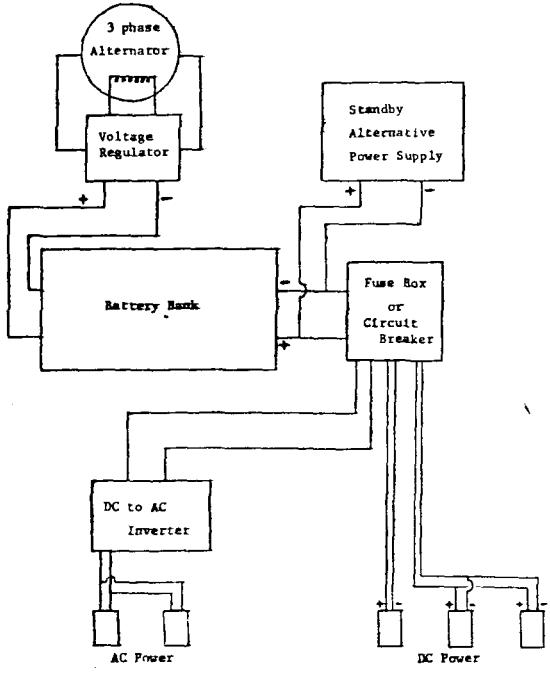

Figure 3: Basic wiring diagram for typical Wind Power System. (Courtesy Wind Power.)

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TABLE 5
Wind speeds and available power data from Wind Power.

WIND DATA FOR BURLINGTON, IOWA

Month	Average Wind Speed[1]	Calculated kwhrs/month[2]	
Jan	11.6	355	
Feb	12.2	413	
Mar	13.4	547	
Apr	12.2	413	
May	10.1	234	
June	9.6	201	
July	8.1	120	
Aug	7.9	112	Average 298
Sept	9.0	165	kwhrs/month
Oct	9.9	220	
Nov	12.4	433	
Dec	11.7	364	

[1] From: Summary of Hourly Observations, US Dept. Commerce, Weather Bureau
[2]Assuming a 3,000-watt wind generator.

DETERMINING POWER AVAILABLE FROM THE WIND
JANUARY, BURLINGTON, IOWA

Velocity Categories	Percent Total Time	Average Velocity	Windpower (Av. Vel)[3] x Time	% of Total Windpower	
0-3	3	1.5	.1	—	wind speeds
4-7	20	5.5	33.2	.01	are too low
8-12	38	10	380	.11	8 to
13-18	28	15.5	1,042.6	.31	25 mph
19-24	8	21.5	795	.24	range
25-31	2	28	439	.13	
32-38	.5	35	214	.06	wind speeds
39-46	.5	42.5	383	.11	are too high

Total Windpower 3,286.9

establish a wind-power generator should take wind-speed readings on the property for a month to locate the best site; then this should be correlated with the data obtained from the Weather Bureau. The amount of power output will depend on the size of the generator and the average wind-speed in the area. With wind power, it is wiser to plan for too much electricity than for the minimum required, for

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in any month there are periods of calm in which, with poor planning, the back-up fossil-fueled generator would have to be used. Every effort should be made to minimize or eliminate the need for a backup unit, for economy's sake.

Before looking at actual costs of the equipment, consider that after installation no fuel is needed and only minimal maintenance. Properly installed, today's units should last 20 years with a major overhaul. Also, to an individual locating in an area outside of power lines, power companies will install lines—but power lines cost from $6,000 to $10,000 per mile, and if you want underground cable the cost will depend on the terrain and go from $10,000 to $50,000 a mile. Engine-powered generators of the same capacity as the wind-power unit being considered cost from $2,000 to $10,000 and have high fuel and maintenance costs. There is no question but that the generator costs in Table 6 are within a competitive cost framework.

Wind Power (Mankato, Minnesota 56001) has an extremely comprehensive booklet on wind gener-

TABLE 6

200 Watt System (12 volt)	*Minimal*	*Better*
Wind generator with stub tower	$395.00	$395.00
Main Tower (30 feet)	150.00	150.00
Battery bank (200 AH)	75.00	75.00
Back-up generator set (1,000 watt)		150.00
Inverter (250 watt)		75.00
	$620.00	$845.00
2,000 Watt System (12 Volt)		
Wind generator with tower cap and regulator	$3,200.00	$3,200.00
Main tower (40 ft)	350.00	350.00
Battery Set (200 AH)	700.00	2,000.00
Back-up generator set (2,000 watt)		350.00
Inverter (500 watt)		500.00
Misc. controls	250.00	250.00
	$4,500.00	$6,650.00
6,000 Watt System (115 Volt)		
Wind generator with tower cap and regulator	$4,500.00	$4,500.00
Main tower (40 ft)	500.00	500.00
Battery bank (500 AH)	1,750.00	2,750.00
Back-up generator set (5,000 watt)	500.00	500.00
Inverter (1,000 watt)	1,500.00	1,500.00
Miscellaneous controls	250.00	250.00
	$9,000.00	$10,000.00

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TABLE 7
Generator capabilities. (Courtesy Wind Power.)

rated generator output	Killowatt hours/month* (by generator and wind speed) Average Wind Speed/Month (average month!) 6	7	8	9	10	11	12	13	14
200	3.2	5.2	7.8	11.0	15.1	20.1	26.2	33.3	41.6
500	8.1	13	19	27.6	37.9	50.4	65.5	83.2	104
1,000	18.3	26	38	55.2	75.8	100.9	131	166.6	208
3,000	49.1	78	114	185.8	227.4	302.7	393	499.7	624.2
5,000	81.8	130	190	276.3	379	504.6	655.1	832.9	1040.3

*Assumes the following: no dc to ac inversion; combined generator/gear/propeller efficiency of .576; wind gusts add 10% power; available wind in range of 9 to 25 mph; total wind power of 2.2 times average wind speed. Caveat: these are based on average month wind conditions. Calm and gusty months may be ±50 percent of these estimates.

ators with a detailed breakdown of suppliers. The booklet is $3.00, and the company has spent a great deal of time preparing it. So it would not be fair to go too greatly into detail and infringe on the company's generosity in allowing its use in the preparation of this paper. The booklet covers the subject thoroughly and the Wind Power engineers are ready at any time to help in the design of a system to fit the needs of an individual, whether for stand-by or full power.

One fact stands out: we are currently running into a deficit of overseas payments for $8 billion to $10 billion per year as a nation, mostly because of imported oil. That same amount of dollars pumped into any of the immediately possible programs could in the next year save more than that amount in lessened imports of oil. And once established, we are "home free."

Clusters of wind-power generators could be placed in high average wind velocity areas, and produce electricity much like a power plant. There are enough areas where this could be done so that it would supply a fair percentage of our public power needs. It would cost money; but money can be earned, whereas oil once used is gone.

To drop back in history, the long bow at Crecy decided the fate of the armored knight and broke the back of the feudal system. Wind and solar energy, together, may break the hold that our current industrialization has on our society and cause a realignment of values. A home heated by the sun; electricity furnished by the wind.

Fanciful? Science fiction at its factual best. Now add a garden, some livestock . . .

But then, if everyone had that, what would our politicians do? ■

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special feature:

As part of our continuing effort to bridge the gap between science and the humanities . . .

special and general creativity

RICH ISAACMAN

1: INTRODUCTION The astute student of physics, having up to this point been introduced to such idealistic-sounding laws as "Conservation of Energy" and "Conservation of Matter" should, in preparation for future work in a scientific field, become acquainted with one of the harsher, though more immediately practical, laws of the natural and academic worlds. That law is "Conservation of Status," or, as it is also known, "Publish or Perish."

Though not attributed to any one discoverer, the validity of this tenet has been demonstrated time and time again. Albert Einstein, for example, having postulated only two highly theoretical and largely impractical theories, achieved immortality by writing exhaustively on them. On the other hand, Sir Percy Blithering-Smythe, an English researcher, built and operated both a fusion-power generator and a fast breeder reactor in 1831, but both he and his devices passed into obscurity because of a failure to get any of his work published.

In order to understand this phenomenon more completely, we shall proceed to investigate some of the theory behind the creative process.

2: FORCE AND ACCELERATION As with any process, the most difficult part of producing some kind of creative output is getting started, which includes the necessity of overcoming a certain intellectual inertia. This quantity is designated S, for Sluggishness, and is measured in units of Lethar Gravities, or "Lethar 'g's" (named after Edward Lethar, who died unpublished).

It is clear that in order to produce a creative acceleration, there must be some force acting upon the Sluggishness of the writer. The resultant acceleration will be proportional to this force, though inversely proportional to the Sluggishness. Thus:

(2.1) $a = F/S$ or $F = Sa$

Acceleration is measured in "words per second^2".

But just what is this force? Clearly, it must be external in origin, since, in general, all internal forces cancel by symmetry. The standard representation of a force, as when dealing with fluids, is the product of a pressure and an

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area. In this instance, the pressure is the external creative pressure upon the writer, measured in the case of a student writer in "grade penalty per day late," and for the case of a freelance writer, in "cents per word paid." Area is measured in "pages^2," or "square pages."
(NOTE: The international standard "square page" is defined as being 8½" x 11", which actually isn't square at all.)

Example If a student, laboring under one Standard Earth Sluggishness (9.8 Lethar 'g's), has a ten-page paper due, with the teacher imposing a penalty of half a grade per day late, what is his creative acceleration?

Solution External Force = pressure × area; F = PA
Creative acceleration a = F/S
= PA/S
= (.5)(10)/9.8 words/sec^2

Hence the student will write with an acceleration of approximately 0.51 words per second^2. Let us examine this result. According to the rules of kinematics, velocity $v = v_o + at$, that is, with an initial velocity of zero, the velocity at time t of a body undergoing an acceleration a will be equal to the product of that acceleration and the time the body has been undergoing it. Therefore, at an acceleration of 0.51 w/sec^2, after a period of only 100 seconds, or one and two-thirds minutes, the student would be writing at a rate of 51 words per second. This is, charitably speaking, highly unlikely for a human being. What has gone wrong?

3: CREATIVITY RELATIVITY What has "gone wrong" in the previous example is that we assumed all quantities to be static and unchanging. In fact, this is not the case. Because of the necessity of having to do more work as one writes faster and faster, the Sluggishness of the writer increases with velocity, according to the following relation:

$$S = \frac{S_o}{\sqrt{1 - \frac{v^2}{c^2}}} \qquad (3.1)$$

Here, S represents the Sluggishness at a given velocity v, while S_o is the "rest" Sluggishness. Note that as the velocity approaches the value c, the quantity v^2/c^2 approaches unity, causing the denominator to go to zero, thereby making S infinite. But as S approaches infinity, the creative acceleration (according to equation 2.1) will decrease to zero, and the velocity will thus remain constant for any length of time after that.

From the above, it can be seen that the value of c is thus the ultimate velocity of the writer, since creative acceleration must cease when it is attained. It is therefore referred to as the "Velocity of Write." Its actual value varies somewhat from writer to writer, as it depends largely on physical makeup (bone structure in the hand, endurance, et cetera), but is

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typically about one or two words per second.

4: MOMENTUM AND ENERGY As Newton said, "A ballpoint pen set into motion will tend to remain in motion." This introduces the concept of creative momentum, another manifestation of inertia. The creative momentum, p, of a writer is defined as the product of the Sluggishness and the Enthusiasm, since, according to conservation (and intuition), the diminution of one entails the increase of the other. Not unexpectedly, the Enthusiasm is proportional to the velocity. Thus,

(4.1) $E = kv$

where E is the Enthusiasm, and k is a writer-dependent constant of proportionality, measured in thought flow, or ideas per second. Hence, with regard to momentum,

(4.2) $p = SE$ or $p = Skv$

Since momentum is a conserved quantity, then, in a closed system, the total creative momentum will remain constant.

(4.3) $S_1E_1 = S_2E_2$

The units of momentum are therefore "lethar 'g' word ideas per second^2."

In a system which is not closed, the thought flow may be externally affected, so that the factor k ceases to be a constant. Hence, whereas the conservative equation can be expressed as $S_1v_1 = S_2v_2$ by dividing out the k, the open-system equation must be modified to $S_1k_1v_1 = S_2k_2v_2$. We will see in the next section just what external factors can affect the thought flow.

The creative energy of a writer is a concept akin to the kinetic energy of kinematics, since both represent a conservative energy related to the square of the velocity. In Creativity, the kine-creative expression for the creative work being done is CE, equal to the integral of the creative momentum with respect to the Enthusiasm:

(4.4) $CE = \int SE\, dE = \frac{1}{2}SE^2$

The standard unit of creative energy (CE) is the Inspiration, equal to one Lethar 'g' idea^2 word^2 per second^4. To gain insight into the physical significance of this, consider that a most prolific author can write with a creative energy of, at most, 10 Inspirations, while an orangutan signing its name provides an output of about .0001 Inspirations.

There are, in fact, two kinds of creative energy. The one just treated is Productive, and is engendered by the act of writing. The other is Potential energy, radiated by the existence of the ideas and the desire to write prior to the act. Potential energy is the product of Inspirational Pressure (measured in "Inspirations per potential page^2") and the area of the desired output (pages^2). Thus, CE = Inspirational Pressure × Desired Area,

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or

(4.5) $CE = \frac{1}{2}SE^2 = P_i A_d$

As can be seen from equation 4.5, the Inspiration is the unit for both Productive and Potential CE. The main drawback with the use of Potential CE is that it cannot be measured until after it has been transformed into Productive CE, and is therefore useful only for calculating how many pages the author wanted to write as opposed to how many he actually wrote, and computing the CE radiated off by friction in the process.

5: DISTRACTION The consideration of friction at the end of the previous section is the first instance up until now that the situations described have not been highly idealized. Up to this point, such items as friction and air resistance have been ignored—the former because it has been left until now, the latter because it has been assumed that, by holding his breath, the author can write in a vacuum.

Frictional interference figures into the calculation of creative energy as the Coefficient of Distraction, so named because it is a numerical factor with value between zero and unity that multiplies (and hence reduces) the thought flow, k. As expected, it is related to the coefficient of friction between the pen and the paper, since the larger the drag is there, the greater will be the restriction of the thought flow (we will not deal with the more advanced case of typewriters and dictation machines here). Thus, we have the quantity d; the coefficient of distraction, which is a function of the coefficient of friction u, the background noise n, and the comfort of the writer, c_w.

(5.1) $d = f(n,u,c_w)$

The exact form of d is quite complicated and beyond the scope of this treatment.

Our statement for the thought flow therefore becomes $k = dk_o$, where k_o is the flow in an ideal, distractionless state. Note that since k is less than the undisturbed k_o, the Enthusiasm and CE are both decreased, the difference being radiated off in the form of frustration. This last phenomenon is extremely prevalent in both writing and scientific circles.

6: CONCLUSIONS We have concluded our introduction to the fundamental principles underlying creative writing. It is hoped that, equipped with this information, the student of Physics or English will be able to transcend mere knowledge of his field, and proceed to a higher state of understanding in which he can convince others that he knows what he is talking about regardless of whether that is actually the case. By mastering Creativity, the ratio of constructive action to abstruse thought can be increased to its theoretical limit, toward the ultimate goal of writing endlessly on a new idea which itself took only a few seconds to think out. Therein lies the secret of success in the academic community. ■

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the reference library *Lester del Rey*

REPENT, HARLEQUIN

Science fiction has obviously become a category of fiction that has made the Big Time, whatever that may be. It seems that it now commands the same respect in the marketplace that has previously been given to the loose category of gothics and young romance. At least that is the judgment of Harlequin Enterprises, who have been flooding the chain store racks with Harlequin Romances. Now they are beginning to flood those same racks with things called Laser Books.

The obvious market for such distribution is not among sophisticated readers. Most of those who pass the displays in the supermarkets and dime stores are not the typical readers of science fiction. But apparently, the publishers of Laser Books expect to attract a readership from regular SF fans as well as the wider audience, since they have been advertising widely in the magazines.

There is a "letter" inside the front cover of each book, written by Roger Elwood, the editor of the series, which also indicates that the books are meant for more than the young and unsophisticated. In it he states: "Laser Books will be your guarantee of exciting, *well-written* adventure . . . full satisfaction for your *discriminating* tastes." He also promises that in the books, "*you will meet real people*, people with whom you can identify." (Italics mine.) OK, with sound characterization, good writing, and intent to reach a discriminating audience, the books should be pretty good, right? I was also told at considerable length by one gentleman from Harlequin that these books were going to be edited and copy-edited with diligent attention to good English usage. Ah well.

Now the first six books (plus a special extra one) are on the stands, and I've had a chance to find just how fortunate we science fiction readers are to have Harlequin discover us as a market. Of course, there was one small hitch. I had to buy the books, since the publisher somehow forgot his promise to send me review copies. In that, perhaps his judgment of the merits I might find was correct. Let's take them in order.

The first book is called a limited collector's edition, and was issued ahead of general publication for distribution as a sample of goodies to come. (It is also available free to any reader of another one of the series upon filling out and mailing a simple questionnaire at the back of the book.) This is **Seeds of Change,** by Thomas F. Monteleone. Like all the other books so far, it

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runs to 190 pages and has a cover by Kelly Freas showing a face in the foreground and a less detailed scene from the story in the background. In format, all the books will be nearly identical, and all those for direct sale are priced at 95¢.

Monteleone's story is about a fairly stock situation. In a giant "cityplex" of the future, the inhabitants are rigidly controlled and dissenters, or those suspected of potential dissent, are killed off. Stone works for the government, hunting evidence of dissent. He's unhappy about it and only relieved when he meets a mysterious woman who seduces him without benefit of the usual love machine. One day he discovers that he has been fingered as a dissenter and is about to be killed off. Naturally, the woman proves to be a member of an outland rebellion; she sends men to save him and then spirits him to the outland. (Just why he's so valuable to the rebellion that they will sacrifice highly trained infiltrators to save him is not quite clear.)

Meantime, a colony on Mars has been abandoned by Earth. But an alien ship suddenly appears and lands, and they find they can now use it to return to Earth. They arrive just in time to team up with the rebels. And weapons on the alien ship turn the battle of the rebels from defeat into stunning victory.

If you hear the sudden beating of hooves as the Martian cavalry dashes over the hill to the rescue, you're right. The alien ship is simply a device to solve the problem of the story. And while the Earth characters in the novel are acceptable—if you forget the "real people" promised by Elwood—the Martians leave much to be desired. After generations away from Earth under the difficult conditions of Mars, they haven't changed: as minor examples, they still waste resources on cigarettes, and Earth's gravity doesn't bother them at all.

The writing is adequate for the story, though there are numerous clumsy constructions. But the editing leaves much to be desired. One can forgive a writer in a hurry for slips, but any editor worth his salary would never let such stuff as "some of them's only job is" (page 129) slip by.

Laser Book #1 is **Renegades of Time,** by Raymond F. Jones. I had some hopes for this one, since Jones is a long-time writer in the field who has often turned out really excellent science fiction. This isn't an example of his best work, but at least I didn't have to force myself to keep reading it. For a reader who isn't too discriminating or sophisticated, it might go down quite well enough. There are sufficient plot twists to keep it moving, and the girl in the story is a fairly attractive one, though most of the other characters are pretty stock.

Her name is Tamarina, and she's an Algoran, a race that has mastered a kind of time travel. Our hero gets sucked into a world in time where he meets her, then eventually makes it to her world. There he learns that a wicked race, the Bakori, are trying to tap the

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time devices of the Algorans and are threatening our whole universe. He goes to the home of the Bakori, and, naturally, manages to rescue the kidnapped gal. (Very kindly, the evil Bakori have held the time channel open so they can escape. Umm, well, an author has to get his hero out somehow.) Then he goes back to Earth, where the Bakori are attacking with illusions. They almost defeat all Earth, but . . . you can guess the ending.

This is fairly routine, obvious adventure. There are holes in the logic of the plot through which a DC-10 could be flown, but they're slipped by the reader fairly smoothly. (For instance, the Bakori can learn English by a moment's staring at our hero's face; but they can't read many of his thoughts that must be closer to the surface of his mind than much of his vocabulary.) It's a novel I would normally not bother to review, since it is neither really good nor really bad.

Herds, by Stephen Goldin, is #2. This begins rather well by showing us the development of the Zarticku on Zarti, where an alien race has lifted a type of herd-living, grazing animals to intelligence. Now the aliens are gone and the Zarticku are civilized, but scared of further aliens. So they send out (by something like astral projection) observers to look for other intelligent life in space. Garnna is such an observer. Fine. He locates Earth and gets in touch with human minds. Good enough.

But then we find the true story, which is nothing more than a case of human murder, blamed by a—naturally—"establishment" type of community on Polaski, who has become a leader of sorts in a local commune. Generally, we can assume that the people in the commune are pretty decent and that the established community people are given to acting as lynch mobs, et cetera. That's the way things are, of course, if you're really with it today. The real problem is that Polaski has been falsely arrested (since we know who did the killing from the beginning) and must be rescued by Deborah, a member of the commune.

Guess what! Turns out that Deborah is psychic. And also, Garnna is so fascinated by the plight of the humans that he overlooks the age-long fear of aliens and all the orders and ethics of his own people to come back and try to contact a human being who can reveal the truth and save Polaski. (There's a bit of evidence planted rather well at the beginning to make this possible.)

This time, the cavalry doesn't ride over the hill at the end: it's been there observing the whole thing, just waiting to rescue everyone, right from the beginning. The human situation here is all wrapped up in a stock murder situation, and the alien's problem is far too weak for the efforts he makes. The ending drags on rather too long, also. Everything seems a bit padded, for that matter.

Then we have **Crash Landing on Iduna** (#3) and **Walls Within Walls**(#5), both by Arthur Tofte. Both Tofte novels are very big with

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the writer of advance copy at the back of the Monteleone book. We're told he is an "old pro" (with quotes)–though pro at what is not stated; certainly not in science fiction under that name. *Crash Landing on Iduna* is supposed to be written with an ending that will surprise you; and that's true–I was very much surprised to find that the height of the humans was the big secret; I didn't think any writer could consider that of any importance. *Walls Within Walls* is blurbed as having "beauty and grace and much human understanding." Well, well. I thought I was reading slowly (in fact, I couldn't force myself to read as rapidly as I do when I'm interested), but I must have missed all that.

Crash Landing on Iduna, in brief, deals with a family that crashes on an alien planet and has to try to survive under rather primitive conditions. They're helped by some natives, bothered by others. Naturally, they team up with the good natives against the bad. And, naturally, at the end another ship from Earth arrives. The writing and characterization are about what one might expect in a book written a hundred years ago for young people. So are the moral lectures on virtue and the religious matter that is dragged in from time to time.

Walls Within Walls deals with a mutant in a world where mutants must be killed. He's brought up in secret, then discovers that there is an underground where mutants have survived, and finally that the rulers are themselves evil mutants. The plot seems to work mostly by coincidence, with the hero just accidentally running into things when he needs them. The ending is pure cornball.

The only reason I can see for having two books by Tofte is that somehow he must be so close to the editor that the editor loses all critical judgment about Tofte's work!

Gates of the Universe, by R. Coulson and G. Deweese, is #4. There's some rather nice material here in places. There's an intelligent reptile and a rather interesting gal named Kari to liven things up. Unfortunately, there's also some stuff that is a little too cute. Our hero, Ross, is a would-be science fiction writer all wrapped up in the imaginary adventures he plans for Commander Freff, his version of a series character he wants to write about. (Where he'll find a market for that stuff, I dunno.) And the final solution to the story is given by Commander Freff, rather than by the mind of Ross.

Anyhow, he accidentally discovers the entrance of a gate between universes while operating a bulldozer. (Such gates are in this year.) He's whisked to another planet where he meets the gal and reptile, goes through a host of adventures, and is sent by a giant computer to fix all the things that have gone wrong with the world. Commander Freff, as I've said, saves him. Incidentally, he understands and speaks the language of the other planet, without the need for any explanation.

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It's a fair adventure story—not something I'd normally bother to review, but better than the previous ones I've discussed. Probably good for the chain store market.

And then there's a surprise. **Serving in Time,** by Gordon Eklund, is a fairly good story with generally good writing and with more than adequate characterization!

This deals with a boy who is recruited into the Time Service of his world in 2500 AD. It's a pretty nice world, rather simple and pastoral, but the Time Service is sort of a compulsory military affair which he bitterly resents. However, he manages to pass the training period and is sent back to Wyoming in the year 1729, where he is to get his real training under the leadership of an experienced time man, Horatio Nextor. Horatio is the first character I've met in this series who strikes me as someone I can identify with; he might be one of Heinlein's characters—and I say that as a compliment.

But then our hero, Jan, discovers things that strike him as all wrong. When he visits such places as New York City in 1840 and Dallas in 1963, he discovers that the Time Service is not merely observing, but is tinkering with time in an attempt to alter the future—the present of Jan, presumably. And he sees acts being committed that strike him as evil. Then he discovers that there is another force operating through time, with one of his companions serving as a traitor to the Time Service he knows.

It's not the freshest idea in the world, but Eklund handles it very well, and his incidents in history are done convincingly. His characters also generally act like people. There is a feeling that this is really history—but not the history we know; which is as it should be for the story. The only faults I find with the development are places where incidents seem to be skipped over, giving a somewhat jerky effect. This may well be the result of having to get the book into the arbitrary 190-page universal length of Laser Books.

It's a book that I might well have chosen to review and recommend with some minor quibbles if I'd come across it elsewhere—and the only one in the series in which I would have been at all interested. If you like adventure stories in science fiction, I suggest you buy Eklund's book and forget the rest.

In general, I don't think that the discriminating readers of this magazine need bother with Laser Books. One out of seven is pretty poor odds, particularly when one considers how bad some of the other six are. As for the buyer in the chain store—well, I doubt that these books are going to convert him very strongly to science fiction. I always thought that lasers were devices which were touted as having a *coherent* product. Now it seems they are being used to tout something that is largely incoherent. My guess is that there isn't enough really good adventure and there is too much muddled guff for the unsophisticated reader. Time will tell.

Finally, I'm happy to announce that a long-out-of-print reference

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book about science fiction is being brought out again, newly revised and expanded. This is the **Science Fiction Handbook, Revised,** by L. Sprague de Camp and Catherine Crook de Camp (197 pp.). The price is $8.50 (postpaid) and it can be ordered from Owlswick Press, Box 8243, Philadelphia, PA, 19101.

The original *Handbook* was published in 1953 and copies have long since disappeared. But with the growing use of science fiction in college and high school courses, the need for such a book has greatly increased. There have been a lot of requests to bring the book back. Now, fortunately, it will again be available.

The book is both a history of science fiction and a general guide to writing (and to understanding). In the revised version, it is brought up to date. More important, it is greatly expanded into an area not covered by the original version.

There is now a large section on the business aspect of writing, covering everything that a writer should know about how to handle the financial aspects of his trade. This is excellent. If I'd had the book when I began writing, I'd be a lot better off financially today. And even now, I found a great deal in it which was valuable and stimulating.

Editor's Note: I highly recommend **Beyond the Known Universe: From Dwarf Stars to Quasars,** by I. M. Levitt (Viking Press, New York, 1974) for anyone who wants up-to-date, technically accurate yet readable information about black holes, quasars, neutron stars, and all the other exciting discoveries of stellar and galactic astronomy. The author is Director Emeritus of the Fels Planetarium.

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Dear Mr. Bova:

In the July 1975 Brass Tacks, James Veldman called for an award for the best contribution to criticism in the science fiction field, to commemorate P. Schuyler Miller.

By a happy coincidence just such an award was about to be announced by the Science Fiction Foundation . . . The award will be given annually for the best criticism published by a single author during the calendar year. The criticism could be anything from a series of newspaper reviews to a full-scale book.

We hope to make the first presentation at the Easter Science Fiction Convention in England in 1976—MANCON. Judging will be by a panel of five judges, chaired for this first year by myself. They will all be well known in the field, but a definite selection has not yet been made. In the first instance, the award will cover work, in English, over two years, the calendar years 1974 and 1975.

We are anxious to publicize this award as widely as possible, because only with the cooperation from the general readership can we be sure of catching the maximum amount of interesting material in our dragnet. If any of your readers have a nomination to make, we would be delighted to hear from them.

The award will be called, officially, "The Science Fiction Foundation Award for Excellence in Science Fiction Criticism." We decided against commemorating the name of P. Schuyler Miller or any other individual critic in the title of the award, because we did not want to suggest, even by implication, that the judges will be preferring one school of criticism over any other.

PETER NICHOLLS
Science Fiction Foundation
North East London Polytechnic
Longbridge Road
Dagenham, Essex RM8 2AS
England

How about giving the first award to P. Schuyler Miller, posthumously?

Dear Ben:

Regarding the July 1975 Editorial and the fact article:

. . . It is indeed unfortunate that the "history" we are exposed to in school involves mostly wars, kings, politics, et cetera, and practically zero exposure to the history of science, technology, and industry. If the history of technology was more

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widely known, we would not expect the Government and the electrical utilities, for example, to bust their tails to develop either MHD electrical generation, the hydrogen economy of Escher, or even solar energy sources. Nor would we logically expect the automotive industry to turn itself inside-out overnight to produce either electric-powered vehicles or a vastly different type of internal combustion engine.

We recognize Thomas A. Edison today as a great genius and completely overlook the fantastic battle that took place between Edison and the gas companies when Edison was attempting to establish his first electrical utility company. In no case in the history of technology or industry has an established, profit-making industrial area spawned its own progressive replacement. The English woodcutters did not turn to the development of the coal mines in the Eighteenth Century when the English hardwood forests finally gave out, precipitating an even more severe fuel crisis than that which purportedly exists today. The New England whale oil companies did not drill the first petroleum wells in Pennsylvania when the shortage of whale oil developed. The gas companies did not develop the electrical utility industry (the electrical utilities finally bought out most of the local town gas companies). Since Studebaker threw in the towel, there is not a single buggy or carriage manufacturer in the automotive industry, and that industry was NOT started by the buggy industry. In the early Nineteenth Century, the canal interests fought the railroads tooth and nail; yet the railroads were pioneered by companies that were set up specifically for the purpose of building railroads, not by canal companies.

Yes, the Government did subsidize one area of Nineteenth Century technical development: the railroads. The Government gave away thousands of square miles of land that was considered worthless by most people. And the only railroad operation that was really supported by the Government—but not carried out by the Government—resulted in the Credit Mobilier and the subsequent political scandal that made Watergate look like a tea party. When the Government got involved in the petroleum industry, we were treated to the Teapot Dome affair. My point: every time the Government has gotten involved in an industry-type technology, there has been hell and taxes to pay.

Question: In the light of the history of technology and industrial development, can we really, honestly expect to see concrete results from any energy program supported by tax money from the Government and carried out by the existing energy industry?

In the light of the history of technology and industrial development, can we really, honestly expect that the automotive industry will come up with the viable solution to the automotive emission-cum-energy-efficiency situation?

If the people of the United States really want to get a fast, ef-

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fective solution to a problem, they should require that their Government provide incentives to technical entrepreneurs to solve the problems in new ways. This does not mean Government grants, subsidies, and other methods of swigging from the Government teat; it means giving tax breaks, limited monopolies similar to the patent laws, absence of regulation and preconceived standards, and other methods of encouraging people to risk their time, effort, and capital in the hopes of bettering themselves while creating something that will benefit everyone else, too.

Incidentally, the strident demands voiced by environmentalists and, nay, even scientists who damned well should know better, that the automotive industry should come up with new, improved, nonpolluting internal combustion engines shows a lack of understanding of both the engineering mind as well as the technology of the industry involved. Engineers are perhaps the most conservative people on Earth; they will proceed only one step at a time, reluctantly, while dragging their known state of the art right along with them because they know it works. Every engineer has at one time or another been bitten or stomped on hard when he has tried something too new with too many new and untried variables in it; hence, he has learned the hard way to proceed with caution, a step at a time, building upon a known foundation. In the practical area of the technology of engine building, it is completely impossible for a company to come out with a totally new engine in less than several years at the very soonest . . .

G. HARRY STINE

The problem today is that new technological developments require enormous investments of risk capital—which is not forthcoming from the financial community. Only major corporations or the Government can invest on this scale.

Dear Mr. Bova:

I read with much interest the July Editorial and the article, "Energy and Survival: The Fork in the Road," and I can only say, Amen!

. . . I have cause to be familiar with the subject and its attendant problems. . . . My company, Washington Synthetic Fuels, has been in business now for some six months. In that time I have approached the gas utilities, automotive fleet users, and various other industries as potential markets. While they feel that hydrogen sounds nice, they don't want to use it now or make plans to do so in the future. They believe that hydrogen will cost them too much. Yet their own trade associations (such as the American Gas Association) and chief consulting services (such as the Institute of Gas Technology) have been thumping the tub for hydrogen for a good number of years now. The general attitude among my prospective clients is that they would rather wait and see what the Canadian Government will do and/or commit themselves to coal gas.

I have also approached financial institutions for backing. Their an-

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swers have been, in somewhat simplified terms, "Why should you bother, LaBelle. Let the Federal Government find the way out, they always do," and, "Why should we invest in anything that the Government hasn't given its full blessing to . . ."

. . . I fear that our energy crisis will not have a happy ending . . . I see, on the part of the general public, a necrotizing Ostrich Syndrome. On the part of those in the business community, I see an alarming display of shortsightedness and a refusal to give ear to their own advisers. As for those who have been chosen to lead in the Government, I find a woeful dearth of resourcefulness and imagination coupled with a deadly fecklessness. . . . If my company and the others like it could start work now, in 1975, by 1990 fossil fuels would be a minor exception rather than the major rule, and the worst would be behind us.

Will we be given that chance, though? I really don't know, but the picture is not bright. Speaking for Washington Synthetic, we are in a position to start moving ahead next week, *if* we were to obtain any type of firm commitment from any sector. Yet here we sit, immobilized by the conditions I have outlined . . .

So if our course is to be such an unpleasant one as you and Norman Spinrad have outlined, it will be due to today's indolence, petty greeds, idiotic rivalries and fears . . . and I agree that the watchwords of the 1990's will be Sacrifice, Scarcity and Want. We will be able to look back, ruefully, to the 1970's and realize what might have been.

THOMAS H. LABELLE
President
Washington Synthetic Fuels, Inc.
PO Box 3021
Bellevue, Wisconsin 98009

By 2000 AD the energy crisis will be over, one way or the other. The big question is, how many human beings will still be alive, and what kind of life-style will they have?

Dear Mr. Bova:

Portions of Norman Spinrad's article on petroleum amounted to some of the stupidest proposals I have seen since your recent article proposing a massive "Federal" fund of worthless greenbacks to support research. Doesn't anyone out there understand the difference between money and wealth (except for a few of your writers of fiction)? Abe Beame would have a field day with these guys.

Mr. Spinrad overlooks (or kneejerkingly rejects) the only sensible method of conserving our priceless petroleum reserves—raise the price so high that consumers *want* to conserve. A rash of more useless laws and regulations, with the accompanying payrolls, only invites waste. Let those who can afford $4.00 per gallon of gasoline drive their 8-mpg cars, and the rest of us will darn well find a way to conserve.

ALFRED M. BENSON
211 Fernwood Terrace
Stewart Manor, N.Y. 11530

OK. And what happens when the $4.00-per-gallon petroleum runs out?

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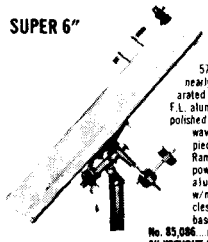

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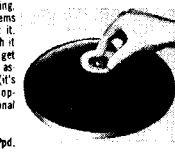

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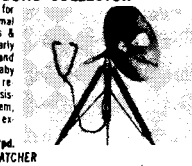

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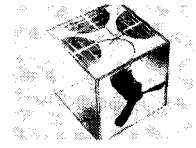

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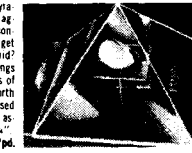

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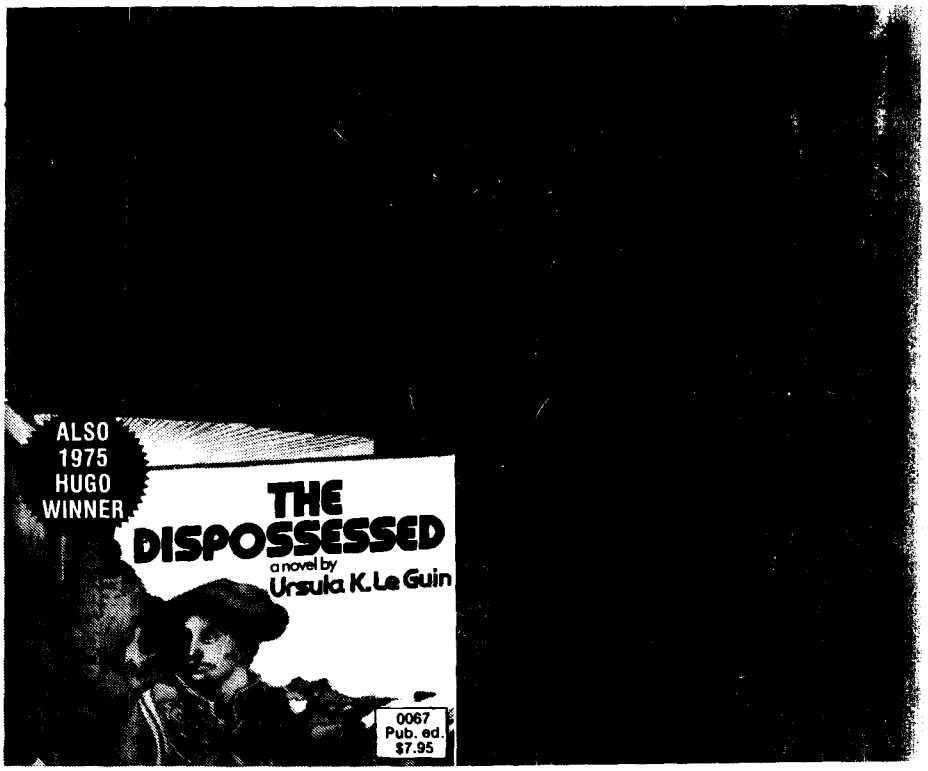

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